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ABSTRACT

This paper includes both a description and analysis of two factors associated with migration: occupational achievement and household composition. Principal comparisons throughout are between the black and nonblack samples, and within each sample, between migrants and nonmigrants. The extent to which geographical mobility takes place is documented and indications are that nonblacks tend to move further and more frequently than blacks, with the blacks showing a northward trend throughout history. Those with greater personal resources and skills, specifically education, are also more likely to migrate, except where individuals would be forced to enter low status and low income occupations by remaining. In this latter case, individuals with little education tend to move. In regard to actual benefits which accrue as a result of migration, data suggest that those whose status was high in a given locale are likely to make lower gains by moving than those whose status was low. Information obtained on household compositions indicates that, overall, kin relationships beyond the immediate family group play a more important part in the black household than in that of the nonblack. Changes in migrant households are more pronounced than changes in nonmigrant households. Several extensive data appendices are included. (Author/CJ)

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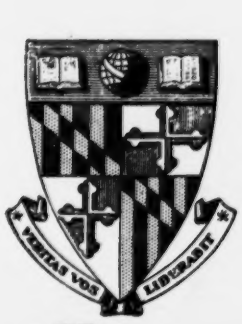


THE JOHNS HOPKINS UNIVERSITY

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THE CENTER FOR THE STUDY OF SOCIAL ORGANIZATION OF SCHOOLS

# MIGRATION AND HOUSEHOLD COMPOSITION: A COMPARISON BETWEEN BLACKS AND NONBLACKS

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## 1.0 Introduction

Among the various changes which individuals experience in the course of their life cycles are changes in the composition of their households and, for many, changes in their places of residence. Individuals can determine neither the type of family into which they are born, nor the location of their birth, any more than other ascribed characteristics such as race or sex. Family of origin and place of birth serve as an index to many aspects of an individual's environment. Some aspects of this early environment have long term effects. As a result, the place in which a man was born and the family into which he was born may continue to influence his life indefinitely.

Beyond the importance of the starting point, household composition and geographical locations throughout the life cycle are of special interest in understanding other aspects of an individual's life. Both of these can have implications for the occupational careers of individuals. Occupational opportunities, for example, may be restricted or enchanced by an individual's location and characteristics of his household. The purpose of this paper is to examine changes in both the household composition and geographical locations over age for a cohort of black and a cohort of nonblack men. In addition, some of these changes will be related to other aspects of their lives, such as their occupational achievement.

In relating household composition to migration, we will be look-

ing at one of the many changes which can result when an individual changes his geographical location. In a recent study, Blau and Duncan suggest that "living some distance away from his childhood home frees a man from the restraints and influences his childhood environment imposes on his career."[1] They hypothesize that migrants should be upwardly mobile in disproportionate numbers since they are less hindered by social obligations and limited opportunities at home. On the other hand, migrants might be disproportionately downwardly mobile because they receive less support from relatives and friends. Regardless of whether these conjectures might turn out to be true, it is necessary first to learn the differences, if any, in the household composition between migrants and nonmigrants; before looking at these differences, it is necessary to explore the question of migration per se for individuals during their lifetimes.

Research in recent years has seen an increased interest on the part of demographers and other social scientists in the analysis of migration histories.[2] Migration histories, however, have rarely been collected in conjunction with other information about the individual which is also of longitudinal nature.[3] Thus, while elaborate analyses of migration data currently exist (both of a macroanalytic and a microanalytic nature), research relating occupational, residential and family histories is scarce.[4] The data base used in the present study offers a unique opportunity for exploring some of the relationships

between different aspects of personal histories.

This paper is based on retrospective life histories collected from one cohort in the population: men who reached the ages of 30 through 39 in 1968. The analysis is based on national samples of nonblack and black men of this age group;[5] the principal comparisons throughout will be between the nonblack and black samples.

The data presented in Table 1.1 shows the geographical and family characteristics of the two populations, black and nonblack, at two points in time: age 14 and age 30.[6] In subsequent sections of this paper, we will attempt to describe the changes which took place in the intervening years and explain how some of these came about.

## 2.0 Geographical Mobility Between Childhood and Time of Interview

There are a number of ways in which the extent of geographical mobility for these samples can be seen. Here we focus both on the extent of the migration and the spatial distributions of the two groups. The data in Table 2.1 shows the cumulative number of moves made by both blacks and nonblacks to a given age. Two things should be noted: nonblacks move more than blacks; second, the majority of the moves take place between 20 and 25 years of age.

The data shown in Table 2.2 adds another dimension to the differences in the extent of migration between the two groups. Here we have the cumulative mean distance (in miles) moved to a given age.[7]

Table 1.1 Summary of Demographic Characteristics of Black and Nonblack Men, 30-39 Years Old in 1968, at Age 14 and Age 30

| Characteristics | Age 14 | | Age 30 | |
|---|---|---|---|---|
| | Black | Nonblack | Black | Nonblack |
| | Mean | | | |
| Household* | | | | |
| Size | 6.69 | 5.48 | 4.74 | 4.72 |
| No. of Older Generaion | 1.85 | 1.93 | 0.23 | 0.15 |
| No. of Own Generation | 4.82 | 3.47 | 1.96 | 1.94 |
| No. of Younger Generation | 0.06 | 0.03 | 2.01 | 1.88 |
| Latitude of Residence | 35.1° | 39.1° | 36.7° | 38.8° |
| Longitude of Residence | 85.0° | 88.9° | 85.6° | 89.8° |
| Occupational Status | -- | -- | 29.4 | 40.5 |
| Yearly Income (1959 Dollar) | | | 4687.0 | 5076.0 |
| | Proportion** | | | |
| Living in: | | | | |
| Farm Area | 0.34 | 0.30 | 0.13 | 0.17 |
| Small Town (25,000) | 0.24 | 0.33 | 0.11 | 0.43 |
| City | 0.41 | 0.32 | 0.74 | 0.40 |
| Division of United States: | | | | |
| Northeast | 0.09 | 0.24 | 0.17 | 0.25 |
| Northcentral | 0.13 | 0.32 | 0.22 | 0.30 |
| South | 0.74 | 0.25 | 0.50 | 0.25 |
| West | 0.03 | 0.13 | 0.07 | 0.17 |
| Perception of Income: | | | | |
| Able to Save | 0.13 | 0.28 | 0.22 | 0.36 |
| Live in Comfort | 0.22 | 0.32 | 0.27 | 0.33 |
| Manage | 0.55 | 0.37 | 0.49 | 0.29 |
| Need Outside Help | 0.09 | 0.03 | 0.02 | 0.02 |
| Living With: | | | | |
| Parents | 0.69 | 0.85 | 0.06 | 0.04 |
| Father but not Mother | 0.03 | 0.03 | 0.01 | 0.01 |
| Mother but not Father | 0.15 | 0.09 | 0.03 | 0.06 |
| Wife | 0.00 | 0.00 | 0.74 | 0.84 |
| N= | 738 | 851 | 738 | 851 |

*The respondent as well as unrelated individuals are included in "size of household." Unrelated individuals are excluded from "generational means."

**Using variance estimates based on simple random sampling, a difference of about .02 in the proportions reported here would be significant at the .05 level. Although there is some increase in variance due to clustering in drawing the samples, which would require a slightly higher difference for .05 significance, a difference of .02 may nevertheless be used as a rough approximation in deciding whether differences are likely to be due to chance.

Table 2.1 Cumulative Number of Residences* by Age, for Black and Nonblack Men 30-39 Years Old in 1968

| AGE | BLACKS | | | NON-BLACKS | | |
|---|---|---|---|---|---|---|
| | MEAN | STD. DEVIATION | N= | MEAN | STD. DEVIATION | N= |
| 16 | 1.089 | .35 | 738 | 1.147 | .52 | 851 |
| 17 | 1.197 | .50 | 738 | 1.229 | .67 | 851 |
| 18 | 1.362 | .65 | 738 | 1.435 | .90 | 851 |
| 19 | 1.553 | .77 | 738 | 1.717 | 1.13 | 851 |
| 20 | 1.736 | .91 | 738 | 2.028 | 1.33 | 851 |
| 21 | 2.004 | 1.04 | 738 | 2.365 | 1.54 | 851 |
| 22 | 2.255 | 1.18 | 738 | 2.718 | 1.74 | 851 |
| 23 | 2.514 | 1.32 | 738 | 3.104 | 1.90 | 851 |
| 24 | 2.707 | 1.43 | 738 | 3.413 | 2.05 | 851 |
| 25 | 2.822 | 1.47 | 738 | 3.710 | 2.16 | 851 |
| 26 | 2.960 | 1.55 | 738 | 3.975 | 2.31 | 851 |
| 27 | 3.066 | 1.64 | 738 | 4.185 | 2.44 | 851 |
| 28 | 3.138 | 1.71 | 738 | 4.360 | 2.54 | 851 |
| 29 | 3.237 | 1.80 | 738 | 4.517 | 2.61 | 851 |
| 30** | 3.300 | 1.87 | 732 | 4.672 | 2.74 | 848 |
| 31 | 3.341 | 1.86 | 673 | 4.877 | 2.88 | 783 |
| 32 | 3.427 | 1.91 | 600 | 5.032 | 2.97 | 702 |
| 33 | 3.441 | 1.80 | 511 | 5.128 | 2.93 | 616 |
| 34 | 3.564 | 1.80 | 444 | 5.306 | 3.03 | 538 |
| 35 | 3.616 | 1.82 | 356 | 5.382 | 3.08 | 442 |
| 36 | 3.795 | 2.01 | 280 | 5.477 | 3.12 | 360 |
| 37 | 3.908 | 2.12 | 205 | 5.653 | 3.27 | 272 |

*Count begins with the Respondent's age 14, i.e., no adjustment made for individuals whose birthplace and residence at age 14 are different.

**See footnote 6.

Table 2.2 Cumulative Distance Moved by Age, for Black and Nonblack Men 30-39 Years Old in 1968

| Age | Black | | | Nonblack | | |
|---|---|---|---|---|---|---|
| | Mean | Standard Deviation | N= | Mean | Standard Deviation | N= |
| 16 | 35.59 | 235.59 | 735 | 43.78 | 294.42 | 840 |
| 17 | 64.91 | 282.41 | 716 | 57.62 | 364.59 | 816 |
| 18 | 109.13 | 370.03 | 649 | 125.06 | 637.70 | 724 |
| 19 | 167.55 | 463.65 | 600 | 193.27 | 769.10 | 646 |
| 20 | 253.53 | 673.99 | 579 | 257.80 | 814.53 | 605 |
| 21 | 352.60 | 774.08 | 551 | 335.24 | 996.42 | 565 |
| 22 | 446.06 | 931.92 | 561 | 434.69 | 1194.60 | 585 |
| 23 | 461.02 | 929.40 | 611 | 450.30 | 1186.44 | 643 |
| 24 | 534.93 | 1023.21 | 641 | 550.98 | 1366.12 | 723 |
| 25 | 580.50 | 1073.68 | 673 | 623.47 | 1425.94 | 774 |
| 26 | 605.76 | 1113.05 | 692 | 688.43 | 1468.07 | 795 |
| 27 | 653.07 | 1180.34 | 701 | 765.21 | 1647.92 | 809 |
| 28 | 676.60 | 1208.17 | 704 | 852.07 | 1769.32 | 820 |
| 29 | 730.84 | 1257.31 | 710 | 912.44 | 1830.67 | 826 |
| 30* | 732.86 | 1268.12 | 703 | 959.15 | 1945.24 | 821 |
| 31 | 796.71 | 1437.82 | 648 | 1035.83 | 2124.47 | 750 |
| 32 | 828.07 | 1506.17 | 578 | 1053.25 | 2165.89 | 678 |
| 33 | 846.59 | 1491.93 | 494 | 1060.12 | 2174.00 | 590 |
| 34 | 892.43 | 1573.66 | 426 | 1143.02 | 2314.28 | 525 |
| 35 | 824.65 | 1312.78 | 342 | 1094.40 | 2414.83 | 433 |
| 36 | 969.87 | 1519.67 | 267 | 1202.31 | 2649.74 | 339 |
| 37 | 1039.02 | 1602.99 | 197 | 1253.01 | 2864.73 | 260 |

*See footnote 6.

In constructing this data, we have eliminated military residences and institutional residences from the tabulation. Thus, a respondent who went into the military and returned to his home town would not receive additional 'mileage.' If he entered the military and moved to a new location, the appropriate distance is that from his point of origin. Likewise, periods of hospitalization or prison (assuming they were not in the same town) are excluded.

Inspection of this table shows that blacks make (on the average) moves which are considerably shorter than those of nonblacks. Until age 24, the mean cumulative distances are approximately the same; after that age, the nonblacks begin to make geographical moves which are of a longer distance.

Aside from these perspectives on the moves themselves, we should also look at the geographical shifts, across ages, for both groups. In Table 2.3, we have the mean geographical coordinates for both samples at different ages. If we look at latitude, i.e. "northness," we find that between ages 14 and 37 the blacks have shifted approximately $2^{\circ}$ or 140 miles north; the nonblack sample, however, has made a slight move southward. When we look at longitude, or "westness," of the two samples, we find considerably less shift. Both groups simply reflect the differential population distributions in the United States (with blacks being more concentrated on the Eastern seaboard).

If we look at regional migration (Table 2.4), we note that most

Table 2.3 Mean Geographical Coordinates for Selected Ages, for Black and Nonblack Men Age 30-39 in 1968

| Age | Black | | | Nonblack | | |
|---|---|---|---|---|---|---|
| | Latitude | Longitude | N | Latitude | Longitude | N |
| 14 | 35.11 | 85.03 | 717 | 39.12 | 88.88 | 806 |
| 15 | 35.12 | 85.07 | 717 | 39.14 | 88.86 | 806 |
| 16 | 35.16 | 85.01 | 715 | 39.11 | 88.83 | 796 |
| 17 | 35.28 | 85.01 | 696 | 39.13 | 88.89 | 774 |
| 18 | 35.26 | 85.22 | 648 | 39.20 | 89.39 | 724 |
| 19 | 35.35 | 85.30 | 601 | 39.16 | 89.35 | 644 |
| 20 | 35.50 | 85.25 | 579 | 39.19 | 89.20 | 600 |
| 21 | 35.74 | 85.34 | 550 | 39.09 | 88.67 | 564 |
| 22 | 36.09 | 85.42 | 559 | 38.70 | 89.03 | 582 |
| 23 | 36.19 | 85.53 | 610 | 38.97 | 89.34 | 641 |
| 24 | 36.36 | 85.58 | 640 | 39.04 | 89.64 | 720 |
| 25 | 36.45 | 85.81 | 670 | 38.97 | 89.82 | 772 |
| 26 | 36.53 | 85.61 | 692 | 38.90 | 90.08 | 792 |
| 27 | 36.57 | 85.72 | 700 | 38.83 | 90.04 | 807 |
| 28 | 36.68 | 85.49 | 701 | 38.76 | 90.15 | 818 |
| 29 | 36.74 | 85.45 | 710 | 38.87 | 90.15 | 825 |
| 30* | 36.67 | 85.59 | 704 | 38.79 | 89.82 | 824 |
| 31 | 36.71 | 85.73 | 648 | 38.83 | 89.79 | 755 |
| 32 | 36.80 | 85.45 | 579 | 38.74 | 89.41 | 677 |
| 33 | 36.90 | 85.82 | 496 | 38.84 | 89.33 | 593 |
| 34 | 36.95 | 85.52 | 429 | 38.99 | 89.51 | 530 |
| 35 | 36.81 | 85.95 | 343 | 38.80 | 88.98 | 432 |
| 36 | 37.12 | 85.40 | 272 | 38.76 | 89.54 | 347 |
| 37 | 37.17 | 84.98 | 202 | 38.74 | 89.79 | 262 |

*See footnote 6.

Table 2.4 Transitions Between Census Regions from Age 14 to Age 30, for Black and Nonblack Men

| Region at Age 14 | Region at Age 30 | | | | |
|---|---|---|---|---|---|
| | North-East | North-Central | South | West | N |
| **Black** | | | | | |
| Northeast | 83% | 3% | 12% | 2% | 66 |
| Northcentral | 2% | 91% | 3% | 3% | 91 |
| South | 13% | 15% | 65% | 6% | 501 |
| West | 0 | 0 | 5% | 95% | 20 |
| **Nonblacks** | | | | | |
| Northeast | 93% | 2% | 4% | 1% | 203 |
| Northcentral | 3% | 84% | 7% | 7% | 252 |
| South | 1% | 9% | 85% | 4% | 205 |
| West | 1% | 3% | 5% | 92% | 106 |

individuals do not change regions between ages 14 and 30. For blacks, we see the substantial out-migration from the South, with 35% of those who were there at age 14 leaving by age 30.[8] In addition to the redistribution to different parts of the country across time and at various ages, respondents also made some changes in the types of places in which they lived. If we look at Table 2.5, we see the shift from farms to towns and cities between age 14 and age 30 for the two groups. The blacks tend to move into or stay in the cities; the nonblacks tend primarily toward the towns and secondarily toward the cities. The urban pull for blacks is somewhat stronger than for nonblacks. At age 30, 45% of the nonblacks who were on a farm at age 14 are still there; among blacks, 36% of those who were on farms at age 14 were still there at age 30.

In describing the extent and type of migration, we have only accentuated differences between blacks and nonblacks and general patterns which have been documented previously. We have made no reference to any characteristics of the respondents themselves. In the next section, we will try to ascertain just who it is that moves and some consequences of the migration.

## 2.1 The Decision to Move[9]

In understanding migration, we would like to posit that residential transitions take place when individuals perceive that migra-

Table 2.5 Transitions Between Cities, Towns and Farms from Age 14 to Age 30, for Black and Nonblack Men

| Type of Place at Age 30 | Black | | | |
|---|---|---|---|---|
| | Type of Place at Age 30 | | | |
| | City | Town | Farm | N |
| City | 95% | 4% | 1% | 301 |
| Town | 64% | 35% | 1% | 148 |
| Farm | 56% | 8% | 36% | 247 |
| | Nonblack | | | |
| City | 71% | 27% | 2% | 288 |
| Town | 28% | 65% | 7% | 271 |
| Farm | 19% | 36% | 45% | 252 |

tion will be beneficial to them in improving their lives. One area in which individuals seek improvement is in the occupational sphere. The amount of improvement, however, that an individual can expect is partially dependent on resources available to him; these resources include education and other skills. The types of returns that individuals can expect from being an incumbent of an occupation are in the forms of occupational status and income. By being a resident of a certain location, an individual has access to opportunities available there. If he finds that he cannot maximize his returns, relative to his resources, in a given location, he is likely to move.

In the present discussion,we shift from considering the individual as the unit of analysis to a consideration of all locations in the study. Our first task will be to explain the probability of moving (or, what is equivalent--the duration of residence) for both black and nonblack samples. The basic question becomes: who moves and from where? In the following section we will examine some actual returns from migration and look at changes in occupational status and income which result from a change in residential location for special sub-samples of the two groups.

Before looking at the determinants of the probability of moving from certain locations, we want to distinguish between "voluntary" and "involuntary" geographical mobility. There are certain types of locations whose occupancy can be considered as "involuntary" and departure

is not at the individual's discretion. For example, it is possible to consider military locations and institutional locations as "involuntary." In addition, since a certain amount of geographical mobility takes place in early childhood and the decision to migrate is not the individual's but his parents, childhood locations are thus "involuntary." Some locations are left as a result of an individual's inability to find employment. However, without data collected specifically for such a purpose it is difficult to identify them. In the analysis which follows, we will be concerned only with understanding moves from locations where the decision can be assumed "voluntary." Thus, military locations, foreign locations, institutional locations, and locations occupied prior to the incumbent's twenty-first birthday are excluded.

The precise distribution of the major types of locations are presented, for blacks and nonblacks, in Table 2.6. After we exclude from United States locations moves made prior to age 21, our basic sample consists of 1304 locations occupied by blacks and 2495 occupied by nonblacks.

In determining the appropriate variables to be included in the analysis, we distinguish between two types: those which are characteristics of the individual and those which are characteristics of the location from which a move takes place. Included in the former are the individual's educational attainment, his age, and his parental back-

Table 2.6 Distribution of All Types of Locations Lived in by Black and Nonblack Men, 30-39 Years Old in 1968

| Type of Location | Black | | Nonblack | |
|---|---|---|---|---|
| | Percent | N | Percent | N |
| United States | 83.6 | 2181 | 84.5 | 3779 |
| Military | 13.3 | 346 | 11.8 | 526 |
| Foreign | 1.9 | 49 | 2.4 | 107 |
| Institutional* | 1.3 | 33 | 1.3 | 60 |
| TOTAL | 100.6 | 2609 | 100.0 | 4472 |

*Includes penal institutions, hospitals, etc.

ground. The latter include the income and status of the occupation occupied in a location, i.e., returns available at the location and geographical coordinates and size of the location itself. As detailed in Appendix A, the appropriate form of the dependent variable for the rate of moving is -log duration.

Table 2.7 shows, separately for blacks and nonblacks, the standardized regression coefficients and multiple correlations estimated from a linear regression of -log duration on the characteristics of the respondent and the occupational returns available to him in a given location (Col. (1)); and second, on individual characteristics, occupational characteristics and other locational characteristics (Col. (2)).

In looking at Col. (1) of this table, for both samples, we note that the greater the resources possessed by an individual, the greater the probability of leaving a given location. Younger individuals, and those who possess higher skills in terms of education, are more likely to leave. The coefficients for parental resources, i.e., father's occupational status and mother's education, are not the same for both groups. In the case of mother's education, the likelihood of moving increases the higher her education. This influence, however, is significant only in the case of the nonblacks. In the case of father's occupational status, the signs are reversed for the two groups. Among blacks, coming from a background where the father

Table 2.7 Summary of Multiple Regressions of Rate of Migration on Selected Variables, for Black and Nonblack Men

| Independent Variables | Black | | Nonblack | |
|---|---|---|---|---|
| | Standardized Regression Coefficients | | | |
| | (1) | (2) | (1) | (2) |
| Age, in months | -.4611* | -.4607* | -.5204* | -.5103* |
| Education | .1715* | .1705* | .1320* | .1368* |
| Father's occupational status | .0305 | .0389 | -.0382* | -.0376* |
| Mother's education | .0289 | .0220 | .0429* | .0434* |
| Occupational status | -.0481* | -.0439 | -.0183 | -.0173 |
| Monthly income, in 1959 dollars | -.1278* | -.1405* | -.0408* | -.0511* |
| Latitude, in miles | | .1314* | | .0169 |
| Longitude, in miles | | .0636* | | .1208* |
| Size | | -.0638 | | .0232 |
| | Multiple Correlations | | | |
| | .5465 | .5562 | .5555 | .5683 |

*Regression coefficients significant at the .05 level.

occupied a higher status occupation increases the likelihood of geographical mobility; in the case of nonblacks, such a background decreases the probability. The parental effect, for nonblacks, is significant; for blacks it is not.

When we look at the coefficients for occupational returns, we find for both samples that the greater the return in a given location to an individual, the less likely he is to leave (i.e., both signs for occupational status and monthly income are negative). Put another way, migrants tend to be those individuals whose job status and especially income is low (taking all other considerations into account).

In addition to the characteristics of the respondent and characteristics of the occupational opportunities available to him at a given location, we should also consider some other characteristics of the location. When we regress duration of residence (-log) on latitude, longitude and size of the locations alone (data not presented), we find that these variables explain only 2.26% of the variance for nonblacks and 1.62% for blacks.

This relative unimportance of the location of residence itself, apart from the occupational opportunities available in it, can be seen by considering the locational characteristics in conjunction with characteristics of the respondent and characteristics of the occupation he occupies in a given location. Columns (2) of Table 2.7 summarize the results from such multiple regressions, separately for blacks and nonblacks.

The signs of the locational coefficients are, however, of some interest. For nonblacks, the signs of all three locational characteristics are positive, although only one (longitude) is significant; the probability of moving increases with "westness." Among nonblacks, living in extremely large metropolitan locations increases the probability of moving, i.e., a positive sign for size; among blacks, the sign is negative, suggesting that those blacks who live in very large urban centers are less likely to leave them. Earlier in our discussion, i.e., results presented in Table 2.5, we found that 95% of blacks who were residents of cities at age 14 were still residents of cities at age 30. The regression analysis discussed here suggests that inter-urban migration is also less likely for blacks.

Among blacks, both of the coordinate measures are significant, indicating that moving from locations which are more north and west (in terms of the overall distribution of locations lived in by blacks in the United States) is greater. This does not say anything about rates of departure from locations in the United States, such as the Southeast or the Southwest, which have seen streams of black out-migration. Rather, it suggests that inter-urban migration is more common than the movement from the South. In addition, it should be remembered that we have excluded from the analysis locations which were lived in prior to age 21; included in those are many from the South; i.e., out-migration with family of origin. In the same way, it is not surprising that for nonblacks the coefficient for "westness" is more important. The dis-

tribution shown in Table 2.3 indicates fairly constant "northness" for nonblacks across ages, but a shift to the west over time.

## 2.2 Occupational Consequences of Migration

Our analysis of duration of residence shows that those locations where the occupational returns for the individual are not high are more likely to be left. The analysis, however, did not answer the question of whether a change of residence had the anticipated effect for the migrant; i.e., whether a change of residence does, in fact, lead the individual to receive more returns such as occupational status and income than he had just prior to migrating.

For this analysis, we focus on locational transitions made by all respondents in the sample. The respondents in the black sample made a total of 1874 locational transitions, those in the nonblack sample a total of 3621. Previously, we excluded locations occupied "involuntarily." Here we exclude geographical transitions which were not made at the individual's discretion: transitions into and out of the military, transitions into and out of penal institutions, and childhood locational transitions. Since our problem consists of looking at occupational returns at destination compared to origin, we look at the individuals who were employed three months prior to making a move and three months after the transition took place.[10]

As before, we are concerned with resources possessed by the in-

dividual himself when he makes the transition: education and parental background. In addition, we have to take into account the characteristics of the state he left and entered: status and income of the occupation left, status and income of the occupation entered, and locational characteristics of both origin and destination. Since we are primarily interested in the increment which results from making a transition, it is the status difference and income difference which are the appropriate dependent variables in the analysis.[11]

The results of these multiple regressions are summarized in Tables 2.8 and 2.9, for both black and nonblack samples. If we look at Col. (1), for each sample in Table 2.8, we note first that while our earlier analysis showed that younger respondents were more likely to leave locations, age has a positive effect on increments in occupational status. In other words, while younger people tend to move more, the older movers gain more in job status. For both samples, the higher educated migrants gain more in job status when they move. Since educational credentials are a surrogate for the skills an individual possesses, it is not surprising that they show such a strong influence in occupational status increments.

When we look at both parental characteristics, we find that the only significant influence is for black father's occupational status. Blacks whose fathers had a higher occupational status gain more in status when they themselves move.

Table 2.8 Summary of Regressions of Occupational Status Difference on Selected Characteristics of the Individual and the Location, for Black and Nonblack Men

| Independent Variables | Black | | Nonblack | |
|---|---|---|---|---|
| | Standardized Regression Coefficients | | | |
| | (1) | (2) | (1) | (2) |
| Age in years | .1116* | .1125* | .0443* | .0404 |
| Education | .3158* | .3072* | .3013* | .2920* |
| Father's occupational status | .0859* | .0914* | .0197 | .0185 |
| Mother's education | -.0451 | -.0448 | -.0203 | -.0165 |
| Job information | | .0665* | | .0491 |
| Occupational status at origin | -.5105* | -.5154* | -.4854* | -.4908* |
| Latitude of origin, in miles | -.2106* | -.2008* | -.0421 | -.0457 |
| Longitude of origin, in miles | -.0935* | -.0871* | -.0297 | -.0276 |
| Latitude difference, in miles | -.1267 | -.1186 | .0121 | .0164 |
| Longitude difference, in miles | -.0305 | -.0279 | .0653 | .0745 |
| | Multiple Correlations | | | |
| | .4614 | .4650 | .3793 | .3817 |

*Regression coefficients significant at the .05 level.

The coefficient for job status at origin is negative. In other words, individuals whose job status was high at origin gain less than whose whose status was low originally. Looked at from the perspective of the respondent who was an incumbent of low status occupation just prior to making a geographical transition, he gains more by migrating than does an individual who occupied a high status position initially. This, however, is merely a statistical regression effect toward the mean as commonly found.

The locational characteristics included in this equation are important in answering the question of whether or not geographical transitions to certain areas of the United States can lead to greater occupational status returns. For nonblacks, the coefficients for the extent of additional "northness" and "westness" moved are insignificant (controlling for origin). For blacks, however, the coefficients for origin only are significant. That is, migration from the "southeast," other things being equal, leads to status increments.

We stated earlier that individuals are likely to make geographical transitions only if they perceive that some gain can accrue to them. Our data does not contain direct information about the reasons for moving. We have, however, an additional item of information which can give us a clue about the extent to which information about the destination can be beneficial. In conjunction with the occupational history, respondents were asked whether they "had a job" or "knew of a job" when leaving one employer for another. Since, however, in the

present analysis every geographical shift also entails a job shift, we can interpret this item of data as some indication of the extent to which the respondent was aware of his occupational opportunity at destination.

Col. (2) of Table 2.8 summarizes the results, for each sample, from a multiple regression which includes all the previously discussed variables as well as a dummy variable which takes the value of 1 if the respondent replied that he "had a job" or "knew of a job," and 0 otherwise. For both blacks and nonblacks, the sign of the coefficient is positive; only for blacks, however, is it significant. Presumably, because of the difficulties blacks encounter in finding jobs, having some information is of more use to them than to nonblacks, who may not encounter as much discrimination in being hired.

In Table 2.9, we summarize the regressions parallel to those of Table 2.8, but using income difference as our dependent variable. Here we find the same phenomenon as was observed for occupational status: the lower your income prior to migrating, the more you tend to gain by making a move.

The coefficients for the locational variables themselves reveal a different story than was the case for occupational status. In Table 2.8 we saw that with the exception of migrating out of the southeast, for blacks, these variables were insignificant. Here we see that all of the signs are positive and most of them significant. When we look at "northness" and "westness" of origin, we find that the greatest gains in income accrue to those individuals who are in the north and west.

Table 2.9 Summary of Regressions of Income Difference on Selected Characteristics of the Individual and the Location, for Black and Nonblack Men

| Independent Variables | Black | | Nonblack | |
|---|---|---|---|---|
| | Standardized Regression Coefficients | | | |
| | (1) | (2) | (1) | (2) |
| Age in years | .1703* | .1696* | .1173* | .1133* |
| Education | .0728* | .0612* | .0996* | .0902* |
| Father's occupational status | .0394* | .0450* | .0219 | .0208 |
| Mother's education | .0141 | .0139 | -.0531* | -.0503* |
| Job information | | .0664* | | .0385* |
| Monthly income at origin, in 1959 dollars | -.6771* | -.6742* | -.5598* | -.5599* |
| Latitude of origin, in miles | .3202* | .3301* | .1723* | .1697* |
| Longitude of origin in miles | .3036* | .3103* | .0839* | .0857* |
| Latitude difference, in miles | .4399* | .4488* | .1332* | .1366* |
| Longitude difference, in miles | .3680* | .3714* | .0681 | .0753 |
| | Multiple Correlations | | | |
| | .6241 | .6277 | .5256 | .5262 |

*Regression coefficients significant at the .05 level.

In addition, for blacks, the additional 'mileage' northward and westward entailed by a geographical transition means additional increments in income. Among nonblacks, only additional 'northness' is important.

The results point both to the importance of different wage structures in different parts of the United States and additional increments in income that can accrue to an individual by choosing 'wisely' from where to where to make a geographical transition.

In the above discussion, we have shown that the increments in both occupational status and income which accrue to individuals when they make a geographical transition are dependent on age, education and other variables. It is also possible to document directly the extent to which differences in status increments exist between migrants and nonmigrants, from one year to the next.

The three-year moving averages presented in Table 2.10 are of the increments in mean occupational status from one age to the next for black and nonblack migrants and nonmigrants, for each of the samples. In constructing this table, we looked at the individual's status on a given birthday, say 18, and again at the end of that year, i.e., at age 19, dividing the sample into individuals who had migrated between 18 and 19 and those who had not. Differences in status can thus be calculated. Inspection of the table indicates that both migrants and nonmigrants show status increments for most of the period of the study, with migrants showing a higher gain. However, the documented gains due to migration may be a function of the fact that

Table 2.10 Three-Year Moving Averages of the Increments in Mean Occupational Status from One Age to the Next, for Black and Nonblack Men

| Ages | Black | | Nonblack | |
|---|---|---|---|---|
| | Non-Migrants | Migrants | Non-Migrants | Migrants |
| 17-19 | .517 | .875 | 2.038 | 2.197 |
| 18-20 | .789 | .327 | 1.260 | 2.174 |
| 19-21 | .802 | -2.044 | 1.052 | 1.262 |
| 20-22 | .763 | - .697 | 1.193 | 1.518 |
| 21-23 | .672 | -1.173 | 1.177 | .910 |
| 22-24 | .608 | 1.858 | 1.103 | 1.822 |
| 23-25 | .724 | 1.071 | 1.111 | 1.958 |
| 24-26 | .689 | 2.257 | 1.056 | 1.924 |
| 25-27 | .571 | 1.098 | .860 | 1.307 |
| 26-28 | .387 | 1.948 | .765 | .634 |
| 27-29 | .198 | .995 | .640 | 1.058 |
| 28-30 | .248 | 1.889 | .595 | .940 |
| 29-31 | .334 | 1.011 | .389 | 1.250 |
| 30-32 | .362 | 1.843 | .434 | .568 |
| 31-33 | .276 | 1.490 | .405 | - .111 |
| 32-34 | .216 | 2.915 | .312 | - .592 |

individuals who are low initially, in both income and status, tend to be more likely to move (as shown earlier) and the gains may be a reflection of a regression toward a mean rather than gains due to migration.

In order to see whether migration per se makes a difference, we should include in the analysis both migrants and nonmigrants. Our main interest is in looking at status growth over time and including in the analysis a variable indicating whether or not the respondent has made a geographical transition.

Table 2.11 presents the standardized regression coefficients and the multiple correlations from a regression of status at a given age on status at a previous age (one year earlier), parental characteristics and a dummy variable which takes the value of 1 if the respondent moved between the two ages and 0 if he did not. In the analysis, we include only respondents who had a full-time occupation at both ages. In a regression of this type, which includes a measure of the dependent variable at a prior time, the coefficients for other variables are a measure of the extent to which they are important in incrementing the variable of interest.[12] That is, when we regress occupational status at age 21 on education, parental background, the migration dummy and occupational status at age 20, a positive and significant coefficient for the migration variable would indicate the effect of migration on increments in status. Inspection of the results shows, without any

Table 2.11 Summary of Multiple Regressions of Respondent's Occupational Status at a Given Age on Education at the Same Age, Respondent's Occupational Status One Year Earlier, Father's Occupational Status, Mother's Education and Migration Variable, for Black and Nonblack Men

| Independent Variables | Age 18 | | Age 21 | | Age 24 | | Age 27 | | Age 30 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | B | NB | B | NB | B | NB | B | NB | B | NB |
| | Standardized Regression Coefficients | | | | | | | | | |
| Occupational Status at Age n-1 | .714* | .811* | .794* | .776* | .760* | .705* | .816* | .827* | .919* | .868* |
| Education at Age n | .045 | .136* | .104* | .035 | .111* | .189* | .119* | .084* | .038 | .098* |
| Father's Occupational Status | -.052 | -.089 | -.049 | .056 | -.001 | -.006 | .034 | .010 | .005 | .001 |
| Mother's Education | .078 | -.058 | .075* | -.043 | -.009 | -.014 | -.017 | -.002 | .033 | -.013 |
| Move Between Age n-1 and n | .091 | .000 | -.003 | -.003 | .051 | -.001 | -.023 | .021 | -.037 | .014 |
| | Multiple Correlations | | | | | | | | | |
| | .797 | .761 | .831 | .786 | .844 | .781 | .854 | .893 | .918 | .935 |

*Regression coefficients significant at the .05 level.

exceptions, that migration has no effect on status increments. At most ages, the major source of increments in status is the respondent's education.[13]

In the same way as we asked whether it is migration or other factors which lead to observed status gains, we can perform a similar analysis with income. In Table 2.12 we have the summary of a multiple regression of income at selected ages on income the previous year, education, parental background and the dummy variable indicating whether migration took place during the interval. For blacks, with no exceptions at any of the ages examined, we find the migration variable to be insignificant. In other words, the fact that a geographical transition took place is not important in determining income. For nonblacks, the results are less clear-cut. At two of the five ages, the coefficient for the migration dummy is significant at the .05 level (ages 18 and 24), but the fact that the signs are opposite in the two cases suggests that the apparent effect may be due to spurious unmeasured variables.

The results of the preceding analysis tend to suggest that a strong relationship between migration and occupational achievement, as measured here, does not exist. In the next section, we begin to look at the extent to which changes in household composition may or may not be related to migration.

Table 2.12 Summary of Multiple Regressions of Respondent's Income at a Given Age on Education at the Same Age, Respondent's Income One Year Earlier, Father's Occupational Status, Mother's Education and Migration Variable, for Black and Nonblack Men

| Independent Variables | Age 18 | | Age 21 | | Age 24 | | Age 27 | | Age 30 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | B | NB | B | NB | B | NB | B | NB | B | NB |
| | Standardized Regression Coefficients | | | | | | | | | |
| Income at Age n-1 | .803* | .778* | .801* | .943* | .885* | .954* | .937* | .872* | .903* | .926* |
| Education at Age n | .112* | -.155* | .048 | .048* | .027 | .046* | .012 | .037 | .022 | .054* |
| Father's Occupational Status | .028 | .119 | .060 | -.028 | .045* | -.010 | -.019 | .039* | .028 | .015 |
| Mother's Education | .014 | -.029 | .020 | -.033 | -.019 | -.004 | .031* | .002 | .045* | -.003 |
| Move Between Age n-1 and n | -.033 | -.166* | -.014 | -.017 | .025 | .032* | .005 | .029 | .020 | .019 |
| | Multiple Correlations | | | | | | | | | |
| | .822 | .741 | .831 | .940 | .899 | .960 | .947 | .884 | .903 | .942 |

*Regression coefficients significant at the .05 level.

## 3.0 Changes in Household Composition

Table 1.1 indicated that as children, blacks resided in households containing an average of 6.7 persons; at age 30 the size was an average of 4.7. Nonblack households, however, are smaller at the younger age and approximately the same at the later age. Changes in household size come about in a number of different ways. Members of the respondent's household may move out or in; or, the respondent may form a household of his own. Before looking at the components of these changes, it is instructive to look at the changes in size over the portion of the lifetime covered by this research. Inspection of the means in Table 3.1 shows a steady decrease, for both groups, until age 25 for blacks and age 23 for nonblacks. From those ages to the end of the study period, the size of the household increases again.

As a start towards understanding these changes, we can examine the generational aspects of both black and nonblack households, by age.

The question can be put in the following way: at every age, how many individuals are present in the respondent's household who are his elders, his peers, or of a younger generation? In other words, whereas Table 3.1 showed the size of these household units, it is now possible to look at some of the components. The relationship of these members in the household to the respondent varies by age. Thus, included in "own generation" at the younger ages are primarily brothers and sisters; during the young adulthood years, "own generation" refers primarily to respondent's wife. In the same way, "younger generation" at the earlier

Table 3.1 Size of Household at Selected Ages for Black and Nonblack Men

| Age | Black | | | Nonblack | | |
|---|---|---|---|---|---|---|
| | Mean | Standard Deviation | N | Mean | Standard Deviation | N |
| 15 | 5.66 | 3.39 | 723 | 4.42 | 2.45 | 837 |
| 17 | 5.20 | 3.39 | 713 | 4.13 | 2.43 | 814 |
| 19 | 4.61 | 3.51 | 608 | 3.62 | 2.49 | 648 |
| 21 | 4.03 | 3.36 | 546 | 3.35 | 2.60 | 561 |
| 23 | 3.48 | 2.88 | 611 | 3.01 | 2.52 | 660 |
| 25 | 3.42 | 2.76 | 676 | 3.16 | 2.57 | 781 |
| 27 | 3.61 | 2.74 | 705 | 3.43 | 2.57 | 821 |
| 29 | 3.67 | 2.71 | 717 | 3.64 | 2.50 | 836 |
| 31 | 3.90 | 2.72 | 655 | 3.90 | 2.41 | 762 |
| 33 | 4.25 | 2.80 | 498 | 4.15 | 2.41 | 604 |
| 35 | 4.35 | 2.71 | 344 | 4.25 | 2.21 | 433 |
| 37 | 4.41 | 3.05 | 201 | 4.25 | 2.15 | 260 |

ages includes very few of the respondent's children, whereas this kin relationship becomes important later on. The first part of Table 3.2 shows the mean number of "elders" present in black and nonblack households by age. There are only slight differences between the two groups suggesting that, at the very least, both groups have about equal access to adults throughout their lives. In the second panel of this table, the sources of the larger size of black households become clearer. Until age 26 there are significantly more individuals of the respondents' own generation in the black household; at younger ages these are siblings, and in the early twenties we see the reflection of the earlier age of marriage among blacks. For the remainder of the life history discussed here, differences between the two groups become insignificant. The third panel shows the mean number in the "younger generation." As was the case with the "elder" generation, black and nonblack differences are slight, the blacks tending to have more members of a younger generation present during young adulthood.

The inferences made above about the differences and similarities between the two groups can be examined directly. The generations can be further subdivided and the presence and absence of specific relationships shown. In Table 3.3, we note the percentage distributions of households emphasizing the presence of parents or parental substitutes; in other words, a specification of the first panel of Table 3.2. In this table, we see that blacks are less likely than nonblacks to be living in a household in which both of their own parents are present, and more likely than nonblacks to be living in a household in which

Table 3.2 Mean Number of Members of an Older Generation, Same Generation and Younger Generation Present in the Respondent's Household at Various Ages for Black and Nonblack Men

| Age | Elders | | Own Generation | | Younger Generation | |
|---|---|---|---|---|---|---|
| | B | NB | B | NB | B | NB |
| 14 | 1.85 | 1.93 | 4.82 | 3.47 | .06 | .03 |
| 15 | 1.82 | 1.91 | 4.79 | 3.41 | .07 | .03 |
| 16 | 1.78 | 1.85 | 4.63 | 3.29 | .07 | .03 |
| 17 | 1.65 | 1.77 | 4.31 | 3.09 | .09 | .04 |
| 18 | 1.44 | 1.53 | 4.02 | 2.77 | .10 | .04 |
| 19 | 1.16 | 1.20 | 3.39 | 2.40 | .14 | .06 |
| 20 | .96 | .94 | 2.99 | 2.21 | .21 | .09 |
| 21 | .73 | .76 | 2.64 | 2.08 | .35 | .15 |
| 22 | .58 | .57 | 2.31 | 1.84 | .47 | .28 |
| 23 | .53 | .54 | 2.18 | 1.88 | .66 | .43 |
| 24 | .46 | .49 | 2.15 | 1.93 | .82 | .65 |
| 25 | .39 | .42 | 2.12 | 1.92 | 1.06 | .87 |
| 26 | .36 | .31 | 2.08 | 1.94 | 1.27 | 1.11 |
| 27 | .30 | .26 | 2.01 | 1.97 | 1.46 | 1.32 |
| 28 | .26 | .22 | 1.95 | 1.93 | 1.61 | 1.49 |
| 29 | .22 | .17 | 1.95 | 1.92 | 1.83 | 1.71 |
| 30 | .23 | .15 | 1.96 | 1.94 | 2.01 | 1.88 |
| 31 | .20 | .13 | 1.92 | 1.94 | 2.12 | 2.04 |
| 32 | .19 | .12 | 1.94 | 1.94 | 2.29 | 2.24 |
| 33 | .17 | .09 | 1.95 | 1.95 | 2.45 | 2.44 |
| 34 | .17 | .10 | 1.96 | 1.95 | 2.59 | 2.58 |
| 35 | .15 | .09 | 1.89 | 1.96 | 2.67 | 2.68 |
| 36 | .19 | .08 | 1.87 | 1.93 | 2.75 | 2.70 |
| 37 | .16 | .07 | 1.86 | 1.94 | 2.76 | 2.83 |

Table 3.3 Composition of Respondent's Household Between Ages 15 and 21 with Emphasis on Members of Family of Orientation, for Black and Nonblack Men

| Composition | Age | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15 | | 16 | | 17 | | 18 | | 19 | | 20 | | 21 | |
| | B | NB | B | NB | B | NB | B | NB | B | NB | B | NB | B | NB |
| Parents, own (+ siblings) | 62.0 | 78.6 | 59.6 | 76.5 | 55.5 | 73.1 | 49.0 | 64.0 | 38.6 | 49.6 | 29.9 | 38.6 | 20.1 | 30.3 |
| Parents, one step- (+ siblings) | 5.6 | 5.1 | 5.7 | 4.6 | 6.3 | 4.4 | 5.4 | 3.5 | 3.5 | 3.3 | 3.1 | 2.4 | 3.0 | 1.9 |
| Mother (+ others) | 13.8 | 7.3 | 14.0 | 8.0 | 12.8 | 7.7 | 10.6 | 7.5 | 7.6 | 6.5 | 6.8 | 4.7 | 6.9 | 3.8 |
| Father (+ others) | 2.9 | 3.2 | 2.9 | 3.4 | 2.6 | 3.3 | 2.3 | 3.1 | 2.4 | 1.5 | 1.4 | 1.5 | 1.1 | 1.9 |
| Other kin, i.e. parental substitutes | 13.0 | 3.3 | 13.7 | 3.7 | 14.3 | 4.3 | 14.0 | 3.5 | 14.1 | 3.8 | 13.7 | 3.2 | 11.5 | 1.8 |
| Institutional, all types | 0.8 | 1.4 | 0.9 | 2.6 | 3.1 | 4.5 | 9.6 | 12.8 | 17.4 | 24.0 | 21.5 | 29.1 | 26.2 | 34.0 |
| Alone, or with unrelated individuals | 1.1 | 0.8 | 2.0 | 0.9 | 3.3 | 2.5 | 5.0 | 3.9 | 6.8 | 5.2 | 7.6 | 7.1 | 7.2 | 5.8 |
| With members of family of procreation | 0.8 | 0.2 | 1.1 | 0.2 | 2.2 | 0.2 | 3.9 | 1.6 | 9.5 | 6.0 | 16.0 | 13.4 | 23.9 | 20.6 |
| N= | 738 | 851 | 738 | 851 | 738 | 851 | 738 | 851 | 738 | 851 | 738 | 851 | 738 | 851 |

their mother, but not a father or step-father, is present. The remainder of the difference between blacks and nonblacks in household arrangements is accounted for by the greater percentage of blacks who live with other kin as young children. Beginning with age 18, we see a shift from various types of families of orientation to institutional arrangements and the start of family formation. By age 21, we find that 30.3% of the nonblacks are in households with both parents while only 20.1% of the blacks are in such households. To see more clearly where changes take place after age 21, we turn to Table 3.4; here some of the categories of Table 3.3 have been collapsed and others expanded. The earlier age of marriage as well as the earlier age of child-bearing among blacks is evident. In addition, by age 25, most of the respondents who have been in the Armed Forces have returned to civilian households. The extent to which family members other than parents play a role in the households of blacks may be observed. At age 23, for example, 4.4% of the nonblacks report a relative in the household in which they live (with or without their wives), while 16% of the blacks are living in the presence of relatives.

As these men enter the late twenties, we can look at the households in which they live in a slightly different classification, one which emphasizes variations in their own families of procreation. The distributions shown in Table 3.5 are presented in two-year intervals. By age 28, less than 10% of both samples are living with their family of orientation; the majority of both groups are living with their wives and children.

Table 3.4 Composition of Respondent's Household Between Ages 21 and 25, with Emphasis on the Transition from Family of Orientation to Family of Procreation, for Black and Nonblack Men

| Composition | Age | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | | 22 | | 23 | | 24 | | 25 | |
| | B | NB | B | NB | B | NB | B | NB | B | NB |
| Parents, own + step- (+ siblings) | 23.1 | 32.2 | 16.9 | 23.1 | 15.5 | 21.4 | 11.7 | 18.4 | 9.3 | 16.3 |
| One parent, (mother or father + siblings) | 8.0 | 5.7 | 7.1 | 5.1 | 5.7 | 4.9 | 5.0 | 4.0 | 4.5 | 3.2 |
| Other kin | 11.5 | 1.8 | 9.7 | 1.5 | 9.5 | 1.5 | 7.9 | 1.6 | 6.3 | 1.4 |
| Wife and other kin, (with or without own children | 5.8 | 2.1 | 6.9 | 2.6 | 6.4 | 2.9 | 8.3 | 3.4 | 8.2 | 3.2 |
| Wife only | 5.8 | 8.6 | 6.8 | 11.9 | 8.7 | 13.4 | 10.2 | 15.2 | 12.0 | 17.0 |
| Wife and children | 12.2 | 9.9 | 20.2 | 17.1 | 27.6 | 26.5 | 33.7 | 35.6 | 41.8 | 43.4 |
| Armed Forces | 23.2 | 29.2 | 21.8 | 27.2 | 15.2 | 18.6 | 11.0 | 11.9 | 6.9 | 5.8 |
| Institutional, excl. military | 3.0 | 4.8 | 2.0 | 5.1 | 1.9 | 3.7 | 1.8 | 2.7 | 1.2 | 1.9 |
| Alone, incl. roommates and unrelated individuals | 7.2 | 5.8 | 8.6 | 6.5 | 9.4 | 6.9 | 10.4 | 7.2 | 9.9 | 7.8 |
| N= | 738 | 851 | 738 | 851 | 738 | 851 | 738 | 851 | 738 | 851 |

Table 3.5 Composition of Respondent's Household Between Ages 22 and 30, with Emphasis on the Family of Procreation, for Black and Nonblack Men

| Composition | Age | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 22 | | 24 | | 26 | | 28 | | 30 | |
| | B | NB | B | NB | B | NB | B | NB | B | NB |
| Family of orientations, all types | 24.0 | 28.2 | 16.8 | 22.4 | 13.7 | 14.4 | 9.5 | 9.0 | 8.6 | 5.9 |
| Other kin | 9.7 | 1.5 | 7.9 | 1.6 | 4.7 | 1.8 | 3.0 | 1.7 | 2.1 | 0.9 |
| Kin and children (wife absent) | 0.4 | 0.1 | 0.3 | 0.2 | 0.7 | 0.4 | 1.0 | 0.6 | 1.2 | 0.8 |
| Wife and other kin (without children) | 3.3 | 1.2 | 2.5 | 0.7 | 2.1 | 0.6 | 2.1 | 0.7 | 1.7 | 0.1 |
| Wife and other kin (with own children) | 3.3 | 1.3 | 5.6 | 2.5 | 5.5 | 3.0 | 4.8 | 3.3 | 5.4 | 3.1 |
| Wife only | 6.8 | 11.9 | 10.2 | 15.2 | 11.6 | 15.6 | 10.1 | 13.1 | 9.0 | 9.3 |
| Wife and children | 20.2 | 17.1 | 33.7 | 35.6 | 46.8 | 51.9 | 54.5 | 63.6 | 60.9 | 73.5 |
| Institutional, all types | 23.8 | 32.3 | 12.8 | 14.6 | 4.4 | 4.8 | 3.0 | 1.9 | 1.7 | 1.2 |
| Alone, incl. roommates and unrelated individuals | 8.6 | 6.5 | 10.4 | 7.2 | 10.7 | 7.6 | 12.1 | 6.1 | 9.4 | 5.1 |
| N= | 738 | 851 | 738 | 851 | 738 | 851 | 738 | 851 | 738 | 851 |

## 3.1 Household Composition and Migration

The preceding section discussed household composition with no reference to whether or not migration took place during the portion of the life cycle discussed here. Migration does provide individuals with the opportunity to make other changes in their lives, one of these being to alter the composition of the household in which they are members. The remainder of this discussion will be focussed on changes which occur as a result of making a geographical move.

Our data does not contain information about the respondent's total kin network in a given location. Thus, we should emphasize that if the respondent lived with his parents at one location and the whole family moved to a different location, but the respondent had a residence separate from his parents at destination, we would be unable to detect the parents' presence. The only valid interpretation to be placed on what follows is to say that household members of a given type were or were not present in the respondent's residential unit. In addition, we cannot identify the "head of the household" in each family grouping. Thus, we are only discussing absence or presence of household members without any assumption about the organization of the household.

With the limitations in sample size, it would be difficult to pursue the analysis in terms of specific kin relationships noted in Section 3.1. Rather, we focus on the generational membership of the respondent's household before and after migration. We are interested then, in a number of aspects of the relationship between household composition and mi-

gration. First, we are interested in the differences between blacks and nonblacks in "gain" or "loss" of generational members when individuals are looked at as migrants and nonmigrants. In addition, we are interested in differences between migrants and nonmigrants within each sample itself. The major concern is the "gain" or "loss" of members of an older or a younger generation and the "gain" or "loss" of a wife.

Our approach is straightforward. Using the reported household composition at each age, we can divide individuals into four groups on the basis of information available for them one year later. We have those individuals who lived in the presence of elders at both time points, those who lived in the absence of elders at both time points, those who lived with elders at the start of a year but not at the end, and those who lived without elders at the start of a year but with elders at the end of that year. The same procedure is repeated in the case of the presence or absence of members of a younger generation or of a wife during a one-year period. In addition, we have information on whether or not the individual migrated during the time period. In the discussion which follows, we treat the "gain" or "loss" of the various kin relationships as separate phenomena.

Throughout the portion of the life history covered here, both blacks and nonblacks tend to "lose" elders from their household. The effect of age on this phenomenon was illustrated in Table 3.2. The tendency for nonblacks to lose these individuals at a slightly faster rate than blacks should be noted. When we compare migrants and nonmigrants,

we find that for both samples migration increases sharply the tendency to lose elders (Table 3.6). However, the black migrants are less likely to lose elders than the nonblack migrants. Among nonblack migrants, the peak period of leaving households in which elders are present is between ages 20 and 25; for black migrants, the peak occurs later, or between ages 25 and 30.

We should next look at the effect of migration on gaining elders in the household. In comparing migrants and nonmigrants, we find that for both samples there is a tendency to "gain" elders more on the part of migrants than nonmigrants. Presumably, this means that migrants are more likely than nonmigrants to move, in a given year, into households which have a member of an older generation present. It might also be the case that the members of the older generation were not in the household, at origin, but joined the household and migrated together with the respondents.

In comparing the differential impact of migration on the gain of elders between nonblacks and blacks, we note that black migrants are more likely to gain such kin relationships as members of the household than nonblack migrants. This difference is most pronounced between the ages of 20 and 25.

In interpreting these results, we suggest that the household composition of blacks follows a pattern which is slightly different from that of nonblacks. Migration provides, for both groups, an opportunity

Table 3.6 Proportion Gaining or Losing Members of an Older Generation in Household in a Given Year, by Migration Status and Age, for Black and Nonblack Men

| Age * Range | Black | | Nonblack | |
|---|---|---|---|---|
| | Non-Migrant | Migrant | Non-Migrant | Migrant |
| | Proportion Losing Members of Older Generation | | | |
| 15-20 | .041 | .453 | .035 | .466 |
| 20-25 | .172 | .623 | .185 | .738 |
| 25-30 | .141 | .750 | .149 | .769 |
| | Proportion Gaining Members of Older Generation | | | |
| 15-20 | .042 | .169 | .073 | .180 |
| 20-25 | .017 | .122 | .019 | .081 |
| 25-30 | .010 | .093 | .006 | .043 |

*Table based on a weighted average of ages in order to smooth out sample fluctuations due to the small number of migrants at each age. For complete tabulations, see Appendix C.

to leave a household in which members of an older generation are present. Blacks, however, are less likely to utilize this opportunity, hence the slower rate of losing older members. At the same time, the dependence of blacks on members of an older generation, be they parents or other kin, is evident in the higher probability of blacks to gain older members in their household, or move to the households of older kin, upon migrating.

These results are consistent with previous observations that blacks are highly dependent on a kin network in making geographical transitions. Our data indicates that the black migrant is less likely than his non-black counterpart to arrive at a new location where he will not have access to relatives of an older generation.

In looking at the gain or loss of members of the respondent's own generation, without further subdivision, we find that the results lead to a confounding between siblings (i.e., members of the respondent's family of orientation) and wives (i.e., a member of the respondent's family of procreation). As a result, we limit the discussion here to the gain and loss of wives (Table 3.7).

For both samples, we find that migrants are more likely to gain a wife in a given year than are nonmigrants; the peak period for both groups is the age range between 20 and 25 years. Among nonmigrants, we find that blacks are slightly more likely to gain a wife during the younger ages, the nonblacks during the oldest age range. Conversely, when migrants are compared, we note that nonblack migrants are more likely

Table 3.7 Proportion Gaining or Losing Wife in a Given Year, by Migration Status and Age, for Black and Nonblack Men

| Age Range * | Black | | Nonblack | |
|---|---|---|---|---|
| | Non-Migrant | Migrant | Non-Migrant | Migrant |
| | Proportion Gaining Wife | | | |
| 16-20 | .055 | .081 | .037 | .134 |
| 20-25 | .169 | .289 | .149 | .400 |
| 25-30 | .121 | .203 | .139 | .356 |
| | Proportion Losing Wife | | | |
| 16-20 | .038 | .138 | .032 | .0 |
| 20-25 | .025 | .058 | .014 | .037 |
| 25-30 | .019 | .139 | .009 | .048 |

*Table based on a weighted average of ages in order to smooth out sample fluctuations due to the small number of migrants at each age. For complete tabulations, see Appendix C.

to gain a wife than black migrants throughout the period discussed here. Between ages 20 and 25, 40% of the migrants are likely to get married during the year in which a move was made. For both groups, then, this is the period of extensive family formation; for nonblacks, especially,this is combined with a change of geographical location.

"Losing" a wife, as discussed here, means either divorce or physical separation. In the lower panel of Table 3.7, we show the extent to which family dissolution and migration are related. First, both for nonmigrants and migrants, we observe a higher rate of family dissolution for blacks than for nonblacks. In addition, we find that black migrants are more likely to lose a wife than any other group. Combining the information from both panels of this table, we can suggest that higher rates of both family formation and family dissolution characterize migrants when compared to nonmigrants. Among nonblacks, it is family formation which is primarily associated with migration; among blacks, family dissolution.

Table 3.8 shows the extent to which gain and loss of members of a generation younger than the respondent interact with migration. Prior to age 20, these members of a younger generation are primarily nieces and nephews living in the household; at the later age ranges, these are primarily the respondent's children. At all ages, for both samples, migrants are more likely to lose members of a younger generation than are nonmigrants. Among nonmigrants, the loss is greatest for the youngest nonblacks, differences between the samples for the other two age ranges

Table 3.8 Proportion Gaining or Losing Members of a Younger Generation in Household in a Given Year, by Migration Status and Age, for Black and Nonblack Men

| Age Range* | Black | | Nonblack | |
|---|---|---|---|---|
| | Non-Migrants | Migrants | Non-Migrants | Migrants |
| | Proportion Losing Members of Younger Generation | | | |
| 15-20 | .067 | .222 | .106 | .310 |
| 20-25 | .027 | .124 | .017 | .076 |
| 25-30 | .023 | .165 | .010 | .056 |
| | Proportion Gaining Members of Younger Generation | | | |
| 15-20 | .028 | .137 | .018 | .069 |
| 20-25 | .137 | .211 | .140 | .174 |
| 25-30 | .126 | .136 | .167 | .171 |

*Table based on a weighted average of ages in order to smooth out sample fluctuations due to the small number of migrants at each age. For complete tabulations, see Appendix C.

being minimal. Among migrants, we find that nonblacks lose more younger generation members at the youngest age, with blacks experiencing greatest loss during the remainder of the ages. Since we saw, in Table 2.7, that black migrants are also more likely to lose a wife upon migrating, these results are not suprising. The black migrant who leaves his wife is also leaving his children.

When we look at the proportions gaining members of a younger generation in the lower panel of Table 3.8, we find that both black and nonblack migrants tend to gain more members of a younger generation into the household than do nonmigrants. This reflects the fact that migration is associated with family formation as observed in the analysis of the relationship between migration and marriage. Differences between migrants and nonmigrants for blacks are greater, however, than differences between migrants and nonmigrants for nonblacks in the two younger age groups. Earlier, we saw that migration was more sharply associated with marriage for nonblacks than for blacks. The fact that the presence of younger generation is more pronounced for blacks than nonblacks is not necessarily inconsistent with that result. This means that blacks are more likely to enter households, upon migration, in which younger children are present, either their own or those of members of their kin network.

The results of the previous discussion can be summarized as follows: first, changes in the household composition of migrants are more pronounced, for both samples, than changes among nonmigrants. The decision to move necessitates many changes; one of the changes which becomes most evident

in our data is a change in household composition. Second, blacks appear to be members of families in which kin relationships are important and maintained (at least in terms of household membership). Thus, blacks are less likely to leave households in which members of an older generation are present and more likely to move into households with such persons--especially when migrating. This kin network effect is also seen in the case of members of a younger generation.

At the same time, a difference exists between blacks and nonblacks in family formation and dissolution and migration; nonblacks are more apt to get married in conjunction with a geographical transition than blacks, and blacks are more likely to leave their wives in the year in which they move.

## 4.0 Summary and Conclusions

The present paper has included both a description and analysis of two phenomena associated with migration: occupational achievement and household composition. The work was based on retrospective life histories collected from a cohort of black men and a cohort of nonblack men. Both groups were 30 to 39 years of age in 1968. The principal comparisons throughout the analysis were between the black and nonblack samples and, within each sample, between migrants and nonmigrants.

Our first task was to document the extent to which geographical mobility took place for both samples. We noted, as have other researchers, that nonblacks tend to make more moves and longer moves than blacks. In addition, we saw that the black cohort tended to move northward during the course of its history. For nonblacks, a slight southward migration was observed as well as a westward migration.

In looking at the decision to move, we distinguished between resources possessed by an individual and the returns he obtains, in the form of occupational status and income, by being a resident of a specific location. We found that individuals with greater personal resources and skills, specifically education, were more likely to migrate. At the same time, those individuals who were incumbents of occupations at a given location which gave them low returns, i.e., low occupational status and income, were more likely to move.

In considering the actual benefits which accrue to individuals when they make a geographical transition, we saw that individuals whose

occupational status and income were high in a given destination were likely to make lower gains by migrating than those whose income and status were low. The question was then raised as to whether migration *per se* was responsible for the observed gains of migrants, or whether the attendant occupational transition was the cause of the gains. In other words, we wanted to test whether the documented gains due to migration may be a function of the fact that individuals who are low initially, in both status and prestige, tend to be more likely to move, and whether the gains may be a reflection of a regression toward the mean rather than gains due to migration. An analysis which included both migrants and nonmigrants suggested that a strong relationship between migration and occupational achievement does not exist.

In our analysis of household composition, we first documented changes over the life cycle and black-nonblack differences. Overall, it became evident that kin relationships, other than members of the individuals' family of orientation or procreation, play a more important part in the household composition of blacks than of nonblacks. Since the data is restricted to individuals living the the same household, we are unable to distinguish, in the analysis relating household composition and migration, between total absence of specific kin relationships at a given location and simple absence from the household. In spite of this limitation, we find that changes in the households of migrants are more pronounced than changes in households of nonmigrants. The analysis shows that the black migrant is less likely to arrive at a destination and be without access to members of an older generation than his nonblack

counterpart. A similar finding was observed in the case of members of a younger generation. Black migrants, however, are more likely to leave their wives when migrating than are nonblacks and, in addition, less likely to gain a wife as a part of relocation.

# APPENDIX A

## Methodological Considerations

# Appendix A

## Methodological Considerations

The analysis of both migration *per se* and differences in the household composition between migrants and nonmigrants, involves a number of methodological and conceptual considerations which need to be elaborated. The present paper uses both the individual and the locations that he occupied as units of analysis; in addition, dimensions of location such as longitude and latitude are utilized. The purpose of this Appendix is to discuss some of the techniques used and the measurement of some of the most important variables.

### A.1 Dimensions of Locations

The movement of individuals between residential locations and their movement between occupations have long presented difficult analytic problems.[14] A major difficulty lies in the fact that both occupations and residential locations are unordered classifications. In the study of occupational mobility, a major conceptual breakthrough consisted of characterizing occupations according to one or more quantitative dimensions.[15] Such quantitative dimensions can be considered as either dependent or independent variables in causal models. In the present chapter, we have likewise characterized geographic locations according to several dimensions, or quantitative variables, in order to simplify the problem of dealing with a set of unordered categories.

Geographic moves are moves of a given distance and in a given direction: moves with two degrees of freedom. There are two principal kinds of coordinate systems used to express these two degrees of freedom: rectangular coordinates and polar coordinates. The rectangular coordinates used can be based on North-South and East-West axes, or on any rotation of these axes. Position on each of these axes constitutes a dimension that can be used as a variable in a regression analysis. If the axes are taken as North-South and East-West, as is the case here, then longitude and latitude can be used as measures of position along the rectangular coordinates. Degrees of latitude and degrees of longitude (transformed to give equivalent miles) can be used as variables in the analysis.

If polar coordinates are used, taking as the point of origin residence at a given age, then one dimension is the distance of a later residence from the earlier residence.

Measurement Procedures for Locations

All locations in the study were originally coded to correspond to codes in the County and City Data Book, 1960. Precise geographical coordinates, i.e., latitude and longitude, were available for every city in the United States of over 25,000 population in 1960 matched to this coding scheme.[16] In the case of smaller places, coordinates of a central location within the appropriate county were used as an approximation. Because of the way in which this coordinate system handles

the curvature of the earth's surface, lines of latitude are always parallel, and thus degrees of latitude are always the same distance apart (approximately 69 miles). Longitudinal lines, however, are all great circles, and are thus closer together near the poles. East-West distances required a transformation of longitudinal differences depending on the latitude. In all of the regression analyses, latitude and longitude were transformed to miles north of the equator and west of the Greenwich meridian.

Distances between location A and B on the earth's surface are calculated by means of the formula:

$$d^2 = (69*(a - b))^2 + (69*\cos a*a' - 69*\cos b*b')^2$$

where

d = distance in miles
a = latitude of A
a' = longitude of A
b = latitude of B
b' = longitude of B

## A.2 Direct Analysis of Movement

While the technique for handling the geographical locations in which individuals reside described above is of use in the analysis of geographical location and movement, it does not deal directly with the act of moving. The life history data available in the present study allows us to focus directly on the moves of interest. We can, in

effect, locate each change and use this change as the unit of observation. To do so, however, involves some conceptual changes. Specifically, a mathematical model has to be specified which guides the data-retrieval and use of the data in Section 2.2.

The appropriate model for data of the sort analyzed here is a continuous-time stochastic process. Such a process has the flexibility, beyond the usual discrete-time process, of allowing changes to occur at any point in time. The model, in its simplest form, is given by the equation

$$\frac{dp_i}{dt} = -q_i p_i \ , \qquad \text{A.2}$$

where there is movement from state i (e.g., a given geographical location), and where $q_i$ is the fundamental parameter of the model, a "transition rate" analogous to the transition probability of the discrete-time stochastic process. This quantity, $q_i$, is the total transition rate out of state i to all states and is equal to the sum of transition rates to specific states. The nature of our data is such that direct computation of the transition rate, $q_i$, would be simple if the Markovian assumptions were satisfied. It is possible first to isolate the time at which a transition occurs. Using these time points it is then possible to calculate the duration of residence time in a given state i. Under Markovian assumptions, the inverse of the expected duration time is the transition rate $q_i$.

A major problem will have to be solved. The transition rates or probabilities of leaving cannot be assumed constant in time, contrary to the Markovian assumptions. They vary systematically with age, declining over adult ages. Since the durations of stay in a state will be spaced in age, it will not be possible to estimate the $q_i$'s as the inverse of durations. Hence it is necessary to take into account the variations of $q_i$ with age.

One solution to this problem is to assume that probabilities of leaving are constant, not in real time, but in a time scale we shall call "psychological time."[17] The concept of psychological time can be thought of as a time scale in which the unit is the interval between impulses to leave a current location or state. There is thus a constant probability that an individual will move on any of these impulses; hence, durations will be exponentially distributed in psychological time.

Assume now that the interval between impulses increases over time according to the process:

$$\frac{d\,y(t)}{dt} = \gamma\, y(t), \qquad \text{A.3}$$

where $y(t)$ is the size of the interval between psychological impulses at age $t$. Thus, the increment in the interval between impulses with a small increment, $dt$, of real time is proportional to $y(t)$, the length of the interval at age $t$. This process then implies that as the indi-

vidual gets older, the intervals between impulses or a "psychological minute," becomes longer. If we assume that the interval between impulses is what governs an individual's perception of time, then as the individual gets older, more and more real time elapses between impulses; i.e., time appears to go faster and faster.

If we integrate Eq. A.3 we get

$$y(t) = e^{\gamma t} \qquad \text{A.4}$$

Taking logarithms in equation A.4 gives:

$$\log\ y(t) = \gamma t \qquad \text{A.5}$$

Hence, we expect a linear relationship between the logarithm to the interval between impulses, and real time. The actual duration of a state can be taken as a geometric average of the $\underline{y(t)}$'s in the period between entering and leaving a state, or the logarithm to the duration as an arithmetic average of $\underline{\log y\ (t)}$. Taking t as the midpoint between entering and leaving a state, therefore, ensures a linear relationship between log duration and t.

The probability of leaving is constant in psychological time; therefore the probabilities of leaving in real time can be written as

$$q_i\,(t) = \frac{q^*}{y(t)} \qquad \text{A.6}$$

where q* is the constant probability of leaving in psychological time. Taking logarithms and inserting log duration for $\underline{\log y(t)}$ at the midpoint between entering and leaving, we get

$$\log\ q_i\,(t') = \log q^* - \log d, \qquad \text{A.7}$$

where d is the observed duration. Hence at age t', the midpoint between entering and leaving a state, $\underline{\log q_i}$ will equal $\underline{-\log d}$ plus an additive constant. It follows that

$$\log q_i = \log q^* - \gamma t'$$

The dependence of $\underline{\log q_i}$ on characteristics of the individual and state of origin can now be conceived of as one of the residual variance in $\underline{\log q_i}$ after the effect of age has been taken into account. The simplest model of dependence is a linear one on $\log q_i$

$$\log q_i = a + \sum_{j}^{J} b_j x_j + \sum_{k=1}^{K} c_k r_k + \beta t' \qquad \text{A.8}$$

where

$x$ is the value of variable $j$ of state of origin;

$b_j$ is the effect of variable $j$ in increasing the transition rate;

$r_k$ is the value of variables $k$ of an individual:

$c_k$ is the effect of variable $k$ in increasing the transition rate;

$a$ is the value of the transition rate when the values of all variables $x_j$ and $r_k$ are zero; and

$t'$ is the age of the individual at the midpoint between entering and leaving a state

Some further considerations indicate the appropriateness of this formulation. The quantity $\underline{q_i}$ is non-negative; for a non-negative quantity like a transition rate, the functional decomposition which is analogous to a linear decomposition for an unbounded quantity is an exponential linear decomposition, as indicated above.

On a second ground as well, this functional decomposition of the transition rate is appropriate. If a least squares estimation of coefficients in equation A.8 is carried out, with log transition rate as the dependent variable, then the distribution of errors appears appro-

ximately independent of $q_i$, or homoscedastic. On statistical grounds, this property of homoscedasticity, or normally distributed errors, is a valuable one, for the use of least square estimation procedures is based on the assumption of homoscedasticity.

Measurement of Related Variables

In addition to an appropriate form of the probability of moving and locational variables discussed above, the analysis uses a number of other variables not fully explained in the text. Here we will restrict ourselves only to the scaling and scoring of occupational status, education, and income.

In scaling occupations, we use the comprehensive list of prestige scores recently developed as a result of studies conducted by the National Opinion Research Center.[18] These scores are available for all detailed census occupational titles. The occupational status rating assigned to the respondent's father refers to the occupation held by the father at the time the respondent was age 14. Occupational status scores utilized for the occupation held by the respondent refer to full-time occupations. In the text, the terms "occupational status," "job status," or just "status" are used interchangeably.

Parental education and the respondent's education have been scored in the following way:

0: Less than four years of schooling
1: Elementary, four to seven years
2: Elementary, eight years
3: High school, one to three years
4: High school graduate
5: Post-high school, vocational, etc.[19]
6: College, one to three years
7: Bachelor's degree or four years college
8: College, five years or more

In the life histories, respondents were asked to give the starting and ending wages, appropriate time units for these wages (weekly, hourly, etc.) and the average number of hours worked/week for every job, starting at age 14. All income reported was converted to dollars/ month. In those cases where hours were not reported, mean hours were estimated from the Department of Labor statistics. The present analysis uses monthly income which has been converted to a constant dollar, purchasing value of $1.00 during the period 1957-1959.

## A.3 The Analysis of Household Composition

In the previous sections of this Appendix, we noted that geographical locations are initially unordered categories which can be compressed into a number of distinct dimensions. In addition, we showed that it is possible to focus on the transition between these locations directly. In the analysis of household composition, we are faced with similar problems. What are the relevant dimensions of a household's composition toward which attention should be directed? The most obvious dimension by which a household can be characterized is its size. Depending on the life cycle state of an individual, the size of the household can have different meanings. Thus, at the earlier stages, being a member of a large family implies that resources have to be shared among many individuals.[20] In adulthood, the size of one's family of procreation may have implications for the type of one's labor force participation.[21]

Another dimension of a household which is of analytic importance is the generational relationship to the respondent of its members. With

no exceptions, sociological research considers the educational attainment of an individual's parents as an indicator of the type of environment in which he is raised, thus helping to predict his own attainment. The present work considers the presence and absence of members of the older generation, the respondent's generation and those who are of a younger generation. In addition to the generational relationships, some attention is also paid to the presence and absence of specific kin; i.e., parents, spouses and children.

Measurement of Family and Household Variables

In the retrospective life histories collected, the respondent was asked to recall the members of the various households in which he lived. Any change in the composition of a household was recorded and the relationship to the respondent of its members noted. Since there can be a large number of possible relations in a household, as well as unrelated individuals, some form of aggregation of types is a necessary prerequisite to an analysis. In addition to isolating the specific kin discussed in Section 3.0, counts of a number of generational relationships are utilized. "Elders" include parents, step-parents, parents-in-law, aunts and uncles, and grandparents. In the respondent's "Own Generation" are included siblings, cousins, the respondent's wife or mistress and siblings-in-law. "Younger generation" includes children, nieces and nephews, step-children, mistress' children, and grandchildren.

# APPENDIX B

## Perception of Income Adequacy and Migration

## APPENDIX B

### Perception of Income Adequacy and Migration

The descriptions and analysis in this paper were based on objective information collected in the life history study. This Appendix examines one of the subjective items of information collected in the interview and relates it to migration; i.e., perception of income adequacy at various periods in the lives of the blacks and nonblacks interviewed.

Respondents were asked to think about the various periods in their lives and try to assess the extent to which income available to the household was adequate for its needs. No instructions were given to the respondent as to a definition of "adequacy," although respondents were asked to respond in terms of four broad categories: (a) the household needed outside assistance; (b) was able to manage without outside assistance; (c) lived in comfort without saving; and (d) was able to save. Given the nature of the question, it would be difficult to assign a quantitative meaning to the categories. The categories may be subject to different interpretation by different individuals and answers could be influenced by different interpretations of life style. The choice between "living in comfort without saving" and "saving" can be the result of individual preferences; likewise, an interpretation of "being able to manage" is a function of both expectations and definitions of a minimal style of life. Finally, requesting and receiving outside assistance is a function of the availability of such resources (both public and private) and individual choices.

Initially, we assume that the four choice categories are arranged on a continuum and look at the extent to which changes occur across ages, for both blacks and nonblacks. The data in Table B.1 is the percentage distribution, by age, of the four income adequacy categories. At all ages, blacks perceive the amount of money available to the household in less favorable terms than do nonblacks; however, the difference in the lowest category narrows over time. At age 15, 9% of the blacks indicate that the household needed outside help; by age 31, only 2.8% indicate that this is the case. We also note a constant 14% difference between the two groups in indicating an ability on the part of the household to save money.

The size of the household for which the respondent is reporting is related to the choice categories. In Table B.2, the mean household size for each of the income adequacy categories is presented for selected ages. With minor exceptions, the larger the size of the household, the more likely is the respondent to indicate that it was just able to "manage" or needed outside help. The differences, however, are more pronounced at the younger ages than at the later ones for both samples.

While perception of income adequacy also may be based on some expectations by the individual of what constitutes a satisfactory life style, it should have some relationship to actual income. At the earlier ages, individuals presumably would be more satisfied with a small income than at later ages; younger people earn less than older people and have, in general, fewer family responsibilities. Table B.3 gives the mean yearly income, by age, and the income adequacy categories, for both samples.

Table B.1 Percentage Distributions of Responses to Retrospective Perception of Household "Income Adequacy" by Age, for Black and Nonblack Men

| Age | Black | | | | Nonblack | | | |
|---|---|---|---|---|---|---|---|---|
| | Household was able to: | | | Household Needed Outside Help | Household was able to: | | | Household Needed Outside Help |
| | Save | Live in Comfort | Manage | | Save | Live in Comfort | Manage | |
| 15 | 13.5 | 22.0 | 55.4 | 9.0 | 27.8 | 32.2 | 37.1 | 2.8 |
| 16 | 13.6 | 21.9 | 55.6 | 8.7 | 27.9 | 32.4 | 36.8 | 2.7 |
| 17 | 13.6 | 22.4 | 55.8 | 8.3 | 28.4 | 32.5 | 36.7 | 2.4 |
| 18 | 13.2 | 23.0 | 56.8 | 6.9 | 28.2 | 32.0 | 37.0 | 2.6 |
| 19 | 14.3 | 24.1 | 56.2 | 5.4 | 26.4 | 31.5 | 40.0 | 2.2 |
| 20 | 15.2 | 26.3 | 53.7 | 4.6 | 26.1 | 31.4 | 40.6 | 1.7 |
| 21 | 15.5 | 26.1 | 53.8 | 4.6 | 24.9 | 30.4 | 42.4 | 2.3 |
| 22 | 15.6 | 25.7 | 54.6 | 3.9 | 25.6 | 30.2 | 41.9 | 2.2 |
| 23 | 15.8 | 26.5 | 53.4 | 4.2 | 25.9 | 30.0 | 42.6 | 1.8 |
| 24 | 15.1 | 26.9 | 53.5 | 4.4 | 25.3 | 30.3 | 42.7 | 1.5 |
| 25 | 16.3 | 27.9 | 52.8 | 2.9 | 25.9 | 32.6 | 40.0 | 1.9 |
| 26 | 16.9 | 27.9 | 51.9 | 3.1 | 28.8 | 32.3 | 37.3 | 1.5 |
| 27 | 17.1 | 27.7 | 52.0 | 3.2 | 30.3 | 32.7 | 35.7 | 1.3 |
| 28 | 18.9 | 26.7 | 51.3 | 2.9 | 31.0 | 34.0 | 33.4 | 1.5 |
| 29 | 19.9 | 26.8 | 50.6 | 2.6 | 34.7 | 33.8 | 29.7 | 1.8 |
| 30 | 21.9 | 26.7 | 49.0 | 2.2 | 36.4 | 32.8 | 29.1 | 1.5 |
| 31 | 23.5 | 25.9 | 47.8 | 2.8 | 37.6 | 32.0 | 28.6 | 1.8 |
| 32 | 24.5 | 26.0 | 46.6 | 2.7 | 38.0 | 32.3 | 28.3 | 1.2 |
| 33 | 23.5 | 26.9 | 46.5 | 2.9 | 40.3 | 29.1 | 28.6 | 1.7 |
| 34 | 24.3 | 27.0 | 46.1 | 2.5 | 41.3 | 31.0 | 25.9 | 1.6 |
| 35 | 24.9 | 28.3 | 44.1 | 2.5 | 40.3 | 32.8 | 25.1 | 1.5 |
| 36 | 24.2 | 29.3 | 42.7 | 3.6 | 41.2 | 32.5 | 24.5 | 1.6 |
| 37 | 28.6 | 27.6 | 38.3 | 5.3 | 42.8 | 31.8 | 23.8 | 1.4 |

Table B.2 Mean Household Size by Income Adequacy Categories and Age, for Black and Nonblack Men

| Age | Black | | | | Nonblack | | | |
|---|---|---|---|---|---|---|---|---|
| | Save | Comfort | Manage | Need Help | Save | Comfort | Manage | Need Help |
| 15 | 4.49 | 5.21 | 6.09 | 6.23 | 3.78 | 4.43 | 4.85 | 5.70* |
| 17 | 3.84 | 4.62 | 5.66 | 6.14 | 3.57 | 4.11 | 4.53 | 5.65* |
| 19 | 3.57 | 4.13 | 4.90 | 6.17 | 3.20 | 3.52 | 3.96 | 4.00* |
| 21 | 2.83 | 4.14 | 4.06 | 5.85* | 3.05 | 3.25 | 3.56 | 4.21* |
| 23 | 2.86 | 3.11 | 3.66 | 5.52* | 2.56 | 3.13 | 3.22 | 2.71* |
| 25 | 2.53 | 3.27 | 3.66 | 4.79* | 2.74 | 3.31 | 3.35 | 1.92* |
| 27 | 3.16 | 3.51 | 3.78 | 3.86* | 3.14 | 3.56 | 3.57 | 3.70* |
| 29 | 3.22 | 3.68 | 3.83 | 4.29* | 3.37 | 3.83 | 3.72 | 4.86* |
| 31 | 3.55 | 3.88 | 4.04 | 4.61* | 3.71 | 3.73 | 3.52 | 3.12* |
| 33 | 4.21 | 4.04 | 4.39 | 5.73* | 3.98 | 4.41 | 4.10 | 5.00* |
| 35 | 4.12 | 4.21 | 4.61 | 5.11* | 4.16 | 4.16 | 4.17 | 1.53* |
| 37 | 4.31 | 3.98 | 4.73 | 4.90* | 4.13 | 4.22 | 4.49 | 4.67* |

*Based on less than 30 cases.

Table B.3 Mean Yearly Income by Income Adequacy Categories and Age, for Black and Nonblack Men

| Age | Black | | | | Nonblack | | | |
|---|---|---|---|---|---|---|---|---|
| | Save | Comfort | Manage | Need Help | Save | Comfort | Manage | Need Help |
| 21 | 3815 | 3427 | 3098 | 3178* | 4197 | 4229 | 3559 | 3301* |
| 22 | 4189 | 3683 | 3257 | 3188* | 4636 | 4308 | 3910 | 4894* |
| 23 | 4107 | 4077 | 3433 | 3055* | 4786 | 4594 | 4102 | 3210* |
| 24 | 4597 | 3963 | 3645 | 3317* | 5107 | 4678 | 4289 | 4762* |
| 25 | 4661 | 4192 | 3751 | 3307* | 5238 | 4991 | 4518 | 4558* |
| 26 | 4889 | 4376 | 3886 | 3320* | 5485 | 5239 | 4811 | 4920* |
| 27 | 5141 | 4462 | 4067 | 3882* | 5818 | 5376 | 4787 | 3913* |
| 28 | 5373 | 4493 | 4131 | 3605* | 6090 | 5810 | 4985 | 4459* |
| 29 | 5440 | 4717 | 4174 | 4234* | 6445 | 6018 | 4985 | 4796* |
| 30 | 5587 | 4895 | 4291 | 3594* | 6791 | 6204 | 5178 | 5353* |
| 31 | 5804 | 4992 | 4343 | 3192* | 6932 | 6405 | 5421 | 3716* |
| 32 | 5908 | 5063 | 4423 | 4797* | 7320 | 6670 | 5357 | 4367* |
| 33 | 6067 | 5156 | 4566 | 3778* | 7798 | 6551 | 5769 | 5175* |
| 34 | 6238 | 5442 | 4527 | 3819* | 8292 | 6670 | 6064 | 4017* |
| 35 | 6018 | 5456 | 4604 | 5150* | 8313 | 6792 | 6304 | 4249* |
| 36 | 6670 | 5604 | 4404 | 4845* | 8496 | 6543 | 6233 | 4634* |

*Based on less than 50 cases.

As expected, the more "satisfied" the respondent, the higher the mean income was. In some instances, the mean income of those who needed outside help was greater than that of some of the other groups. This is probably due in part to the small number of individuals in that category. The effect of age on the mean income of the different income adequacy groups is evident. At age 21, the nonblacks who were able to save had a mean income of $4200 and the blacks who were able to save had a mean income of $3800. At age 30, the means of these groups are $6800 and $5600, respectively. The mean income for nonblacks who were able to save at age 21 is lower than the mean incomes of all of the nonblack groups at age 30. The mean income of blacks who were able to save at age 21 is midway between the "manage" and "need outside help" groups at age 30. At almost all ages, the mean income of the blacks who indicate that they were able to save is less than the mean income of nonblacks who were able to live in comfort but not save. The nonblacks who were "able to save" had a mean income that was about $400 greater than the mean of the blacks at age 21. By age 30, this difference had grown to $1200 and appears to be increasing.

The relationship between changes in income perception and migration status can be examined by dividing respondents into those who migrate in a given year and those who do not at the various ages. Instead of dealing with the income categories, however, we will deal here only with the direction of change from one year to the next. Thus, an individual who reported at the beginning of one year that the household was "able to save" and at the end of that year that "it was able to live in comfort without saving"

would be regarded as having experienced a "negative change" in income adequacy. Alternatively, "needing outside help" at the start of one year but "being able to manage" at the end of the year would be considered "positive change" in income adequacy. Figure B.1 shows a plot of the proportion of respondents, by age, who moved in the positive direction in income adequacy by migrant status for both samples. The plot is based on a three-year moving average; this is necessitated by the small number of migrants at each age and the rather large sampling fluctuations that attend such small case bases. Blacks, both migrants and nonmigrants, are more likely to indicate an improvement over ages than are nonblacks. In Figure B.2, the percentage who are classified as experiencing a "negative change" by age and migrant status, for each sample, is plotted. Again, a higher proportion of blacks, migrants and nonmigrants alike, are classified as having "negative change" in the perception of income adequacy. The data suggest that the economic circumstances of blacks are perceived as less stable than those of nonblacks. Beyond this, the figures also imply that migrants perceive more economic changes than nonmigrants. At all points in time, on both graphs, a higher proportion of migrants than nonmigrants are classified as changing income adequacy categories.

Net change in income adequacy can be computed by subtracting the percent of a given group classified as experiencing a negative change from the percentage classified as experiencing a positive change. This difference is tabulated in Table B.4 by age and migrant status for both blacks and nonblacks. Again, three-year moving averages have been com-

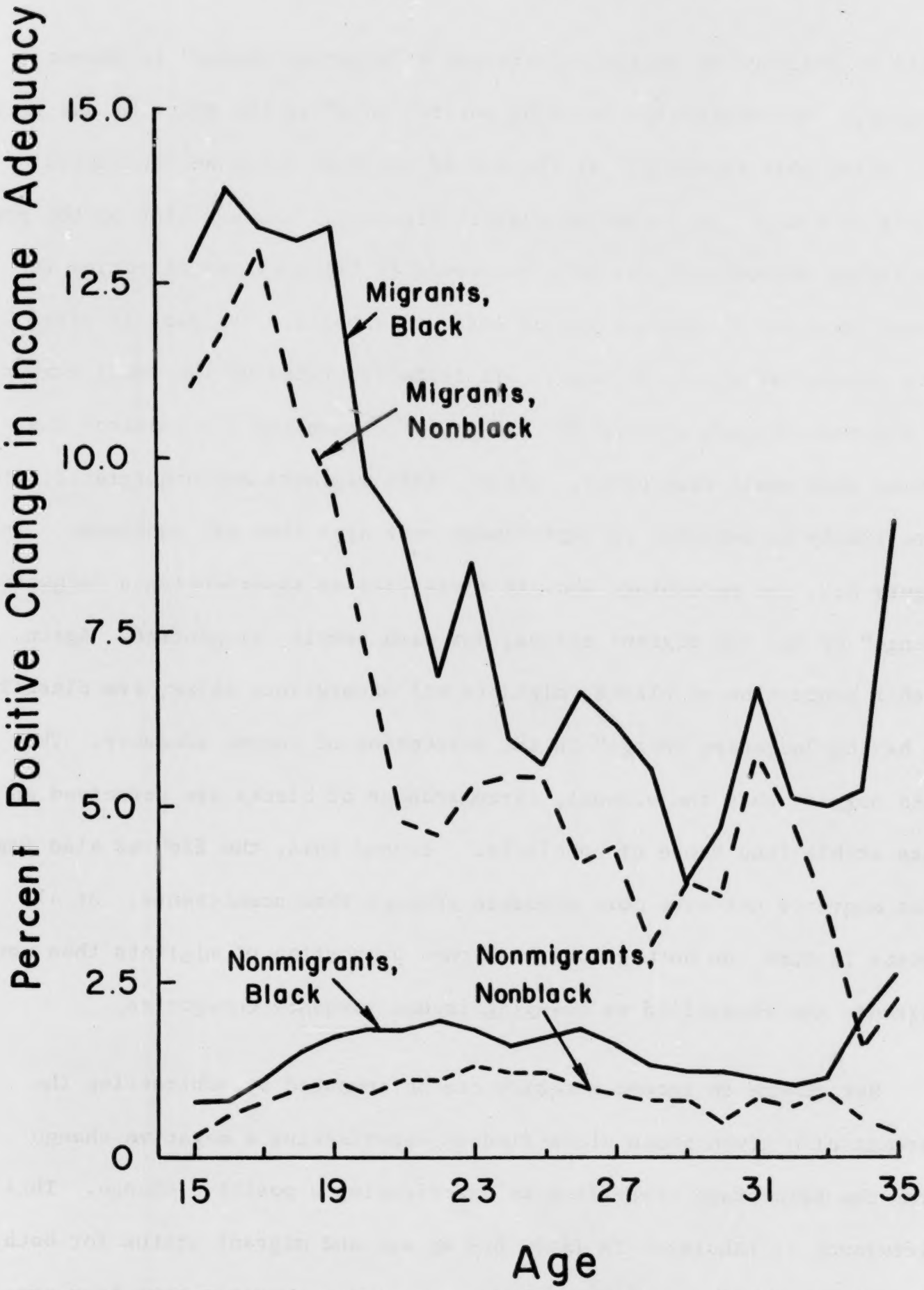


Figure B.1 Percentage of Respondents Whose Income Adequacy Changed in the Positive Direction from the Beginning of One Year to the to the Beginning of the Next, by Age and Migration Status, for Black and Nonblack Men

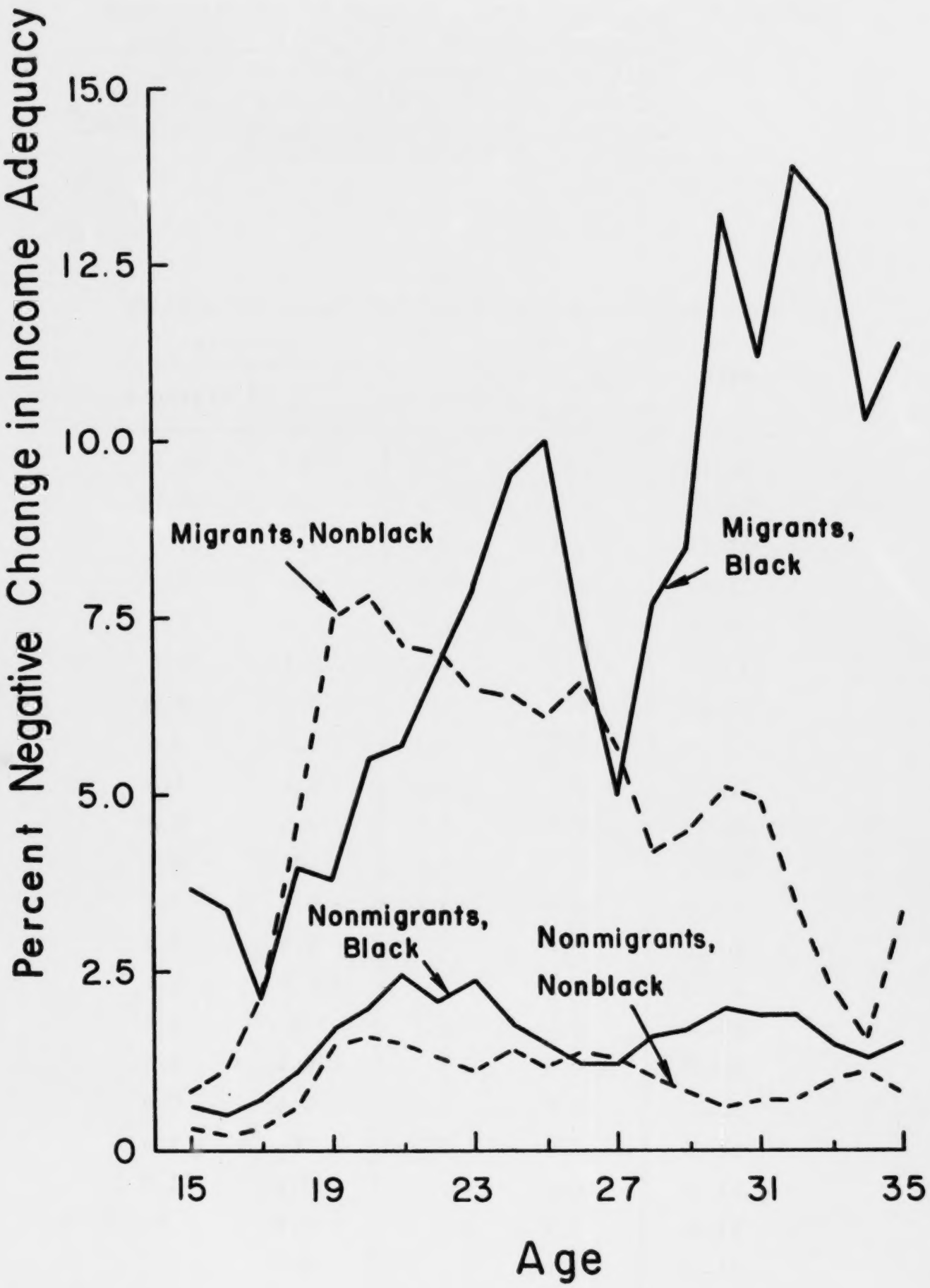


Figure B.2 Percentage of Respondents Whose Income Adequacy Changed in the Negative Direction from the Beginning of One Year to the Beginning of the Next, by Age and Migrant Status, for Black and Nonblack Men

Table B.4 Three-Year Moving Average of Net Percentage Difference Between Respondents Indicating Positive and Negative Changes in Income Adequacy from the Beginning of One Year to the Beginning of the Next, by Age and Migrant Status, for Black and Nonblack Men

| Ages | Black | | Nonblack | |
|---|---|---|---|---|
| | Non-Migrants | Migrants | Non-Migrants | Migrants |
| 14-16 | 0.2 | 9.2 | 0 | 10.2 |
| 15-17 | 0.3 | 10.3 | 0.4 | 10.7 |
| 16-18 | 0.3 | 11.2 | 0.4 | 10.8 |
| 17-19 | 0.4 | 9.0 | 0.4 | 6.2 |
| 18-20 | 0 | 9.5 | - 0.4 | 2.2 |
| 19-21 | - 0.2 | 4.1 | - 0.7 | - 0.6 |
| 20-22 | - 0.7 | 3.3 | - 0.4 | - 2.3 |
| 21-23 | - 0.3 | 0 | - 0.3 | - 2.4 |
| 22-24 | - 0.6 | 0.6 | 0.1 | - 1.3 |
| 23-25 | - 0.3 | - 3.6 | - 0.1 | - 0.9 |
| 24-26 | 0.2 | - 4.4 | 0 | - 0.7 |
| 25-27 | 0.6 | - 0.6 | - 0.4 | - 2.3 |
| 26-28 | 0.4 | 1.2 | - 0.4 | - 1.3 |
| 27-29 | - 0.3 | - 2.1 | - 0.2 | - 1.1 |
| 28-30 | - 0.5 | - 4.7 | 0 | - 0.6 |
| 29-31 | - 0.8 | - 8.5 | - 0.1 | - 1.4 |
| 30-32 | - 0.8 | - 4.5 | 0.1 | 0.8 |
| 31-33 | - 1.0 | - 8.9 | 0 | 1.4 |
| 32-34 | - 0.3 | - 8.3 | - 0.1 | 1.2 |
| 33-35 | 0.7 | - 5.2 | - 0.6 | 0 |
| 34-36 | 1.0 | - 2.3 | - 0.5 | - 1.1 |
| 35-37 | 0.3 | 3.2 | - 0.3 | - 3.9 |

puted to reduce the sample fluctuation due to the small number of migrants at each age. Among nonmigrants, in both samples, the net change is nearly zero throughout the period covered by the study. Migrants, however, show a net change that is positive during the first five or six years and negative or nearly zero thereafter. The downward trend in net change is more pronounced among black migrants than among nonblack migrants. After age 21 to 22, nonblacks remain fairly close to zero; black migrants reach a net change of -9.0% at ages 33-34. The percent of black migrants who are classified as indicating a negative change at later ages is much higher than among nonblacks; in the early thirties, 10% or more of the black migrants are classified as showing a negative change, while only about 4% of the nonblacks indicate a negative change. This difference between the two samples accounts for the black-nonblack difference in the net change.

# APPENDIX C

## Supplementary Tables

Table C.1 Proportion of Respondents Living in the Absence of Members of an Older Generation at the Beginning of Each Year and in the Presence of Members of an Older Generation at the End of Each Year, by Age and Migration Status, for Black and Nonblack Men

| Age | Nonblack | | | | Black | | | |
|---|---|---|---|---|---|---|---|---|
| | Non-Migrants | N | Migrants | N | Non-Migrants | N | Migrants | N |
| 14 | .211 | 19 | 0 | 2 | .300 | 20 | .333 | 3 |
| 15 | .190 | 21 | .500 | 4 | .111 | 18 | .167 | 6 |
| 16 | .120 | 25 | .400 | 5 | 0 | 29 | 0 | 4 |
| 17 | .083 | 36 | .250 | 12 | .051 | 59 | .167 | 6 |
| 18 | .087 | 69 | .179 | 28 | .026 | 77 | .091 | 11 |
| 19 | .042 | 118 | .200 | 45 | .008 | 129 | .238 | 21 |
| 20 | .048 | 166 | .119 | 59 | .042 | 168 | .154 | 26 |
| 21 | .020 | 202 | .103 | 68 | .019 | 216 | .178 | 45 |
| 22 | .031 | 262 | .129 | 93 | .023 | 302 | .143 | 21 |
| 23 | .019 | 359 | .101 | 79 | .019 | 362 | .108 | 37 |
| 24 | .024 | 419 | .054 | 111 | .012 | 431 | .103 | 29 |
| 25 | .008 | 479 | .046 | 130 | .017 | 469 | .083 | 48 |
| 26 | .009 | 550 | .033 | 123 | .006 | 509 | .159 | 44 |
| 27 | .014 | 591 | .061 | 114 | .013 | 551 | .059 | 34 |
| 28 | .005 | 624 | .020 | 102 | .007 | 559 | .091 | 44 |
| 29 | .002 | 646 | .066 | 106 | .021 | 576 | .108 | 37 |
| 30 | .003 | 602 | .032 | 93 | .004 | 528 | 0 | 24 |
| 31 | .005 | 559 | .028 | 72 | .004 | 475 | .063 | 32 |
| 32 | 0 | 493 | 0 | 64 | .005 | 410 | .048 | 21 |
| 33 | .007 | 440 | .036 | 55 | .017 | 363 | .111 | 18 |
| 34 | .006 | 361 | .024 | 42 | 0 | 287 | .200 | 15 |
| 35 | .003 | 304 | 0 | 20 | .009 | 220 | .100 | 20 |
| 36 | 0 | 224 | 0 | 20 | .006 | 168 | 0 | 4 |
| 37 | .006 | 159 | 0 | 4 | 0 | 114 | 0 | 4 |

Table C.2 Proportion of Respondents Living in the Presence of Members of an Older Generation, by Age and Migration Status at the Beginning and End of Each Year, for Black and Nonblack Men

| Age | Nonblack | | | | Black | | | |
|---|---|---|---|---|---|---|---|---|
| | Non-Migrants | N | Migrants | N | Non-Migrants | N | Migrants | N |
| 14 | .994 | 775 | .906 | 32 | .994 | 662 | .778 | 18 |
| 15 | .995 | 762 | .824 | 51 | .990 | 678 | .769 | 26 |
| 16 | .983 | 751 | .667 | 33 | .986 | 630 | .538 | 52 |
| 17 | .962 | 637 | .514 | 72 | .972 | 545 | .667 | 51 |
| 18 | .928 | 500 | .420 | 81 | .926 | 460 | .453 | 64 |
| 19 | .913 | 378 | .275 | 69 | .911 | 381 | .478 | 46 |
| 20 | .895 | 285 | .475 | 40 | .845 | 291 | .395 | 43 |
| 21 | .834 | 223 | .275 | 51 | .831 | 236 | .417 | 36 |
| 22 | .838 | 185 | .317 | 41 | .830 | 188 | .400 | 40 |
| 23 | .797 | 192 | .250 | 40 | .845 | 187 | .357 | 28 |
| 24 | .770 | 174 | .314 | 35 | .783 | 184 | .300 | 10 |
| 25 | .831 | 154 | .107 | 28 | .856 | 153 | .313 | 16 |
| 26 | .844 | 128 | .222 | 18 | .810 | 147 | .308 | 13 |
| 27 | .832 | 113 | .071 | 14 | .857 | 126 | .182 | 11 |
| 28 | .804 | 97 | .267 | 15 | .867 | 105 | .267 | 15 |
| 29 | .923 | 78 | .300 | 10 | .922 | 102 | 0 | 2 |
| 30 | .882 | 68 | .375 | 8 | .860 | 100 | .286 | 7 |
| 31 | .944 | 54 | .333 | 6 | .947 | 76 | 0 | 4 |
| 32 | .953 | 43 | .250 | 4 | .855 | 69 | 0 | 1 |
| 33 | .941 | 34 | .667 | 6 | .904 | 52 | 0 | 3 |
| 34 | .903 | 31 | .500 | 2 | .860 | 43 | .500 | 2 |

Table C.3 Proportion of Respondents Living in the Absence of a Wife, at the Beginning of Each Year, and in the Presence of a Wife at the End of Each Year, by Age and Migration Status, for Black and Nonblack Men

| Age | Nonblack | | | | Black | | | |
|---|---|---|---|---|---|---|---|---|
| | Non-Migrants | N | Migrants | N | Non-Migrants | N | Migrants | N |
| 18 | .048 | 562 | .105 | 105 | .063 | 512 | .082 | 73 |
| 19 | .061 | 460 | .245 | 102 | .094 | 459 | .143 | 56 |
| 20 | .117 | 369 | .188 | 80 | .128 | 367 | .111 | 54 |
| 21 | .132 | 295 | .368 | 87 | .161 | 317 | .404 | 57 |
| 22 | .110 | 245 | .424 | 92 | .162 | 277 | .244 | 45 |
| 23 | .185 | 254 | .371 | 70 | .168 | 273 | .190 | 42 |
| 24 | .149 | 228 | .417 | 72 | .224 | 259 | .241 | 29 |
| 25 | .174 | 213 | .426 | 61 | .123 | 220 | .324 | 34 |
| 26 | .162 | 179 | .382 | 55 | .120 | 216 | .242 | 33 |
| 27 | .191 | 152 | .362 | 47 | .121 | 214 | .250 | 24 |
| 28 | .134 | 127 | .436 | 39 | .126 | 191 | .133 | 30 |
| 29 | .046 | 108 | .250 | 32 | .131 | 183 | .250 | 20 |
| 30 | .122 | 90 | .314 | 35 | .104 | 154 | .125 | 16 |
| 32 | .127 | 63 | .118 | 17 | .096 | 104 | .400 | 10 |
| 34 | .071 | 42 | .273 | 11 | .075 | 67 | .600 | 5 |
| 36 | .050 | 20 | .333 | 9 | .120 | 50 | .667 | 3 |

Table C.4 Proportion of Respondents Living in the Presence of a Wife, by Age and Migration Status at the Beginning and End of Each Year, for Black and Nonblack Men

| Age | Nonblack | | | | Black | | | |
|---|---|---|---|---|---|---|---|---|
| | Non-Migrants | N | Migrants | N | Non-Migrants | N | Migrants | N |
| 18 | 1.000 | 7 | 1.000 | 4 | .92 | 25 | 1.000 | 2 |
| 19 | .972 | 36 | 1.000 | 12 | .961 | 51 | .818 | 11 |
| 20 | .963 | 82 | 1.000 | 19 | .978 | 92 | .867 | 15 |
| 21 | .969 | 130 | .969 | 32 | .963 | 135 | .917 | 24 |
| 22 | .985 | 202 | 1.000 | 42 | .972 | 213 | .813 | 16 |
| 23 | .987 | 297 | .980 | 49 | .989 | 276 | 1.000 | 23 |
| 24 | .989 | 365 | .932 | 74 | .978 | 356 | 1.000 | 10 |
| 25 | .988 | 420 | .959 | 97 | .968 | 402 | .967 | 30 |
| 26 | .99 | 499 | .977 | 86 | .973 | 440 | .792 | 24 |
| 27 | .991 | 552 | .938 | 81 | .974 | 463 | .857 | 21 |
| 28 | .992 | 594 | .949 | 78 | .983 | 473 | .897 | 29 |
| 29 | .998 | 616 | .952 | 84 | .99 | 495 | .895 | 19 |
| 30 | .984 | 580 | .939 | 66 | .983 | 474 | .867 | 15 |
| 32 | .989 | 473 | .941 | 51 | .989 | 375 | .750 | 12 |
| 34 | 1.000 | 350 | .939 | 33 | .981 | 263 | .833 | 12 |
| 36 | .995 | 219 | 1.000 | 14 | .959 | 146 | 1.000 | 4 |

Table C.5 Proportion of Respondents Living in the Absence of Members of a Younger Generation at the Beginning of Each Year, and in the Presence of the Younger Generation at the End of Each Year, by Age and Migration Status, for Black and Nonblack Men

| Age | Nonblack | | | | Black | | | |
|---|---|---|---|---|---|---|---|---|
| | Non-Migrants | N | Migrants | N | Non-Migrants | N | Migrants | N |
| 14 | 0 | 784 | .031 | 32 | .003 | 665 | .100 | 20 |
| 15 | .001 | 772 | .019 | 54 | .004 | 676 | .032 | 31 |
| 16 | .004 | 768 | .057 | 35 | .005 | 638 | .073 | 55 |
| 17 | .006 | 660 | .024 | 82 | .010 | 582 | .145 | 55 |
| 18 | .018 | 556 | .056 | 107 | .045 | 507 | .110 | 73 |
| 19 | .057 | 475 | .113 | 106 | .063 | 460 | .224 | 58 |
| 20 | .084 | 404 | .125 | 88 | .113 | 379 | .207 | 58 |
| 21 | .097 | 341 | .168 | 101 | .150 | 334 | .236 | 55 |
| 22 | .140 | 314 | .165 | 103 | .132 | 311 | .182 | 44 |
| 23 | .165 | 346 | .145 | 83 | .117 | 308 | .125 | 48 |
| 24 | .126 | 326 | .215 | 93 | .147 | 320 | .167 | 30 |
| 25 | .175 | 314 | .176 | 85 | .138 | 290 | .361 | 36 |
| 26 | .168 | 273 | .179 | 78 | .163 | 276 | .054 | 37 |
| 27 | .153 | 242 | .188 | 64 | .102 | 266 | .042 | 24 |
| 28 | .199 | 216 | .145 | 55 | .108 | 241 | .216 | 37 |
| 29 | .157 | 185 | .196 | 46 | .120 | 234 | .261 | 23 |
| 30 | .152 | 145 | .135 | 37 | .135 | 200 | .105 | 19 |
| 31 | .099 | 111 | .226 | 31 | .122 | 156 | .211 | 19 |
| 32 | .098 | 92 | .053 | 19 | .104 | 125 | .455 | 11 |
| 33 | .079 | 76 | .214 | 14 | .088 | 91 | .200 | 10 |
| 34 | .105 | 57 | .286 | 14 | .040 | 75 | .400 | 5 |
| 35 | .064 | 47 | 0 | 4 | .033 | 60 | .286 | 7 |
| 36 | .071 | 28 | .125 | 8 | .075 | 53 | .667 | 3 |
| 37 | .100 | 20 | .500 | 2 | .128 | 39 | 0 | 3 |

Table C.6 Proportion of Respondents Living in the Presence of Members of a Younger Generation by Age and Migration Status at the Beginning and End of Each Year, for Black and Nonblack Men

| Age | Nonblack | | | | Black | | | |
|---|---|---|---|---|---|---|---|---|
| | Non-Migrants | N | Migrants | N | Non-Migrants | N | Migrants | N |
| 14 | .900 | 10 | 1.000 | 2 | 1.000 | 17 | 1.000 | 1 |
| 15 | .909 | 11 | 0 | 1 | 1.000 | 20 | 0 | 1 |
| 16 | 1.000 | 8 | .667 | 3 | .810 | 21 | 1.000 | 1 |
| 17 | .846 | 13 | .500 | 2 | .864 | 22 | .500 | 2 |
| 18 | .846 | 13 | .500 | 2 | .933 | 30 | .500 | 2 |
| 19 | .905 | 21 | .625 | 8 | .920 | 50 | .778 | 9 |
| 20 | .894 | 47 | .818 | 11 | .963 | 80 | .909 | 11 |
| 21 | .976 | 84 | .833 | 18 | .941 | 118 | .808 | 26 |
| 22 | .977 | 133 | .903 | 31 | .972 | 179 | .882 | 17 |
| 23 | .990 | 205 | .917 | 36 | .979 | 241 | .882 | 17 |
| 24 | .985 | 267 | .906 | 53 | .986 | 295 | 1.000 | 9 |
| 25 | .981 | 319 | .973 | 73 | .967 | 332 | .893 | 28 |
| 26 | .990 | 405 | .952 | 63 | .968 | 380 | .800 | 20 |
| 27 | .987 | 462 | .953 | 64 | .973 | 411 | .714 | 21 |
| 28 | .984 | 505 | .935 | 62 | .976 | 423 | .864 | 22 |
| 29 | .998 | 539 | .943 | 70 | .982 | 444 | 1.000 | 16 |
| 30 | .990 | 525 | .938 | 64 | .984 | 428 | .833 | 12 |
| 31 | 1.000 | 502 | .979 | 47 | .990 | 395 | .882 | 17 |
| 32 | .993 | 444 | .980 | 49 | 1.000 | 354 | .818 | 11 |
| 33 | .992 | 398 | .979 | 47 | .985 | 324 | 1.000 | 11 |
| 34 | 1.000 | 335 | .933 | 30 | .973 | 255 | .833 | 12 |
| 35 | .993 | 281 | .944 | 18 | .974 | 194 | .692 | 13 |
| 36 | .995 | 211 | 1.000 | 15 | .979 | 143 | 1.000 | 4 |

## FOOTNOTES

[1]Blau and Duncan (1967), p. 251.

[2]Lansing and Mueller (1967), Lowry (1966), Morrison (1967, 1968), Taeuber (1961, 1966), and Van Arsdol (1970), among others.

[3]Studies currently being conducted by Herbert S. Parnes, the Center for Human Resources Research, Ohio State University, are the first major attempts to conduct longitudinal studies of labor market experience for subsets of the United States population: men 45-59 years of age, women 30-44 years of age, and young men and women 14-24 years of age. Members of each subset are being surveyed annually for a five-year period, a total of six surveys per group (Parnes et al., 1968, 1969).

Another set of data which is longitudinal in nature consists of the Continuous Work History Tapes of the Social Security Administration. A number of studies, e.g. Blumen, Kogan and McCarthy (1955), Gallaway (1965, 1967), have utilized this information. From some perspectives, however, this data is quite limited. Most critically, while individual income and industrial information are available, occupation and education of the respondents are not.

[4]An exception to this is a study conducted by the University of Texas (Balan, et al., 1969). Their study, however, sampled residents of Monterrey, Mexico.

[5]The universe of the two samples of this study are the total populations of black and nonblack males 30-39 years of age, in 1968, residing in households in the United States. Individuals in the sample were selected by standard multi-state area probability methods. The execution of the sample design consisted of two parts: (a) A national sample, designed to yield the required number of nonblack eligibles plus a number of eligible blacks proportional to their representation in the population as a whole; and (b) A supplementary selection of black households only, designed to supply the additional eligible blacks required to satisfy the design. The black sample consists of blacks interviewed in the National sample and blacks interviewed in the supplementary sample. Only individuals normally classified by the Census as Negroes are included in what we are calling the black sample. In each sample, selection was made so that each person in the universe had an equal probability of being interviewed. The analysis is based on 1589 cases: 738 blacks and 851 nonblacks. The overall completion rate for the study was 76.1% for Sample A and 78.2% for Sample B.

[6]In all of the tables and analyses, it should be noted that the composition of the samples changes after age 30. Respondents interviewed were 30-39 years of age in 1968. The age distribution of the samples, at interview, was as follows:

| Age | Black | Nonblack |
|---|---|---|
| 30 | 9.4% | 8.4% |
| 31 | 10.1 | 9.5 |
| 32 | 11.9 | 10.4 |
| 33 | 8.8 | 8.3 |
| 34 | 12.2 | 11.6 |
| 35 | 9.8 | 10.2 |
| 36 | 9.4 | 10.3 |
| 37 | 9.3 | 10.4 |
| 38 | 10.4 | 9.8 |
| 39 | 8.2 | 10.6 |

[7]For a discussion of the measurement of locational variables, see Appendix A, Section A.1.

[8]In this table, as with most of our discussion, we have not been concerned with the historical period in which moves took place. It should be remembered that our samples were born between 1929 and 1938 and were reaching the different ages at different calendar times.

[9]For a complete discussion of the methodological orientations and techniques employed in this paper, see Appendix A.

[10]The three month restriction is arrived at by assuming that some individuals might leave an employer shortly before migrating; alternatively, other individuals might require a minimal amount of time to find employment. While this restriction means that a maximum of six months might elapse between the jobs under consideration in point of fact very few individuals are unemployed for this long a period of time. Another analysis of this data investigates occupational transitions without regard to whether a geographical transition took place and finds that only 7.0% of the job transitions have a lapse of over six months, apart from respondents returning to full-time education.

[11]The equation is $y_d - y_o = a + b_1 y_o + \sum_j^J b_j x_j$ (a)

where $y_d$ and $y_o$ is status or income at destination and origin; $x_j$ are a set of independent variables. This equation can be rewritten as:

$$y_d = a + (b_1 + 1)y + \sum_j^J b_j x_j. \quad \text{(b)}$$

Hence, whether we take the status (income) increment or the status (income) at destination as the dependent variable, we will produce identical results, except for the coefficient for status (income) at origin. The coefficients for the other independent variables measure the effect of these variables on the gain in status or income in both equations.

[12]See footnote 11 (above) and Coleman (1968).

[13]A discussion of status growth, for both blacks and nonblacks, without reference to migration, can be found in Blum and Coleman (1970).

[14]For further discussion, see Coleman, Blum, and Berry (1970).

[15]In most sociological analysis the dimension of occupation ordinarily used is occupational prestige; another of these dimensions is wages.

[16]We would like to express our appreciation to Dr. Arch C. Gerlach, Chief Geographer, U.S. Geological Survey, for his cooperation in the effort.

[17]Sørensen (1970).

[18]Rossi, Hodge, and Siegel (1970, forthcoming).

[19]Used only if a high school diploma was previously obtained.

[20]It has been shown, for example, that the influence of the size of family of orientation on occupational achievement is negative. Most of the influence operates via educational attainment as an intervening variable (B. Duncan, 1965, 1967).

[21]Hamel (1967) has shown that moonlighting rates tend to increase with the number of children under 18.

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